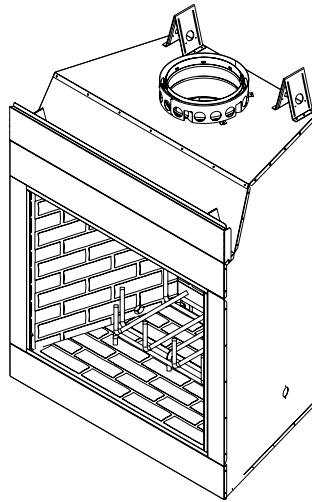


Models:

I60

I80

Wood Burning Fireplace



Owner's Manual
Installation and Operation



NOTICE



DO NOT DISCARD THIS MANUAL

- Important operating and maintenance instructions included.
- Read, understand and follow these instructions for safe installation and operation.
- Leave this manual with party responsible for use and operation.



⚠ WARNING



If the information in these instructions is not followed exactly, a fire may result causing property damage, personal injury, or death.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- Do not overfire. Overfiring will void your warranty.
- Comply with all minimum clearances to combustibles as specified. Failure to comply may cause house fire.

⚠ WARNING



HOT SURFACES!

Screen/mesh, glass doors and other surfaces are hot during operation AND cool down.

Hot screen/mesh and glass doors will cause burns.

- **DO NOT** touch screen/mesh or glass doors until cooled
- NEVER allow children to touch screen/mesh or glass doors
- Keep children away
- CAREFULLY SUPERVISE children in same room as fireplace.
- Alert children and adults to hazards of high temperatures.

High temperatures may ignite clothing or other flammable materials.

- Keep clothing, furniture, draperies and other flammable materials away.

⚠ WARNING



Fire Risk

- For use with solid wood fuel or decorative gas appliance only.
- **DO NOT** install unvented gas logs.



Installation and service of this fireplace should be performed by qualified personnel. Hearth & Home Technologies suggests NFI certified or factory-trained professionals, or technicians supervised by an NFI certified professional.



**Read this manual before installing or operating this fireplace.
Please retain this owner's manual for future reference.**

Congratulations!

Congratulations on selecting a Heatilator wood burning fireplace. The Heatilator fireplace you have selected is designed to provide the utmost in safety and reliability.

As the owner of a new fireplace, you'll want to read and carefully follow all of the instructions contained in this owner's manual. Pay special attention to all cautions and warnings.

This owner's manual should be retained for future reference. We suggest you keep it with your other important documents and product manuals.

Your new Heatilator wood burning fireplace will give you years of durable use and trouble-free enjoyment. Welcome to the Heatilator family of fireplace products!

Homeowner Reference Information

We recommend that you record the following pertinent information about your fireplace:

Model Name: _____ Date purchased/installed: _____




Serial Number: _____ Location on fireplace: _____

Dealership purchased from: _____ Dealer phone: _____

Notes: _____

Listing Label Information/Location

The model information regarding your specific fireplace can be found on the rating plate located on the smoke shield of the fireplace.

Serial Number		Grate		Fireplace Model		
	FIREPLACE NO. []	<small>WARNING: RISK OF FIRE DAMAGE. REPLACE GRATE WITH HEARTH & HOME TECHNOLOGIES INC.</small>		MODEL NO. []	MODEL NO. []	MFG. DATE []
<small>FIRECHAMBER INTENDED FOR USE WITH HEARTH & HOME TECHNOLOGIES INC. LISTED FIREPLACE PARTS. SEE INSTALLATION AND OPERATING INSTRUCTIONS FOR THIS MODEL. ONLY HEARTH & HOME TECHNOLOGIES INC. GLASS DOOR KITS CAN BE INSTALLED ON THIS UNIT.</small>						
FIREPLACE ALSO FOR USE IN MANUFACTURED HOMES		YES <input type="checkbox"/> NO <input type="checkbox"/>	CLEARANCE TO COMBUSTIBLES:	CHIMNEY 2 IN. MIN.	FIREBOX []	IN. MIN.
 FAN KIT MODEL NO. [] & []		RATED AT		115 VOLTS, 50/60 Hz.,	[]	AMP. 
<small>DO NOT OVERFIRE. USE ONLY: SOLID WOOD FUEL OR LISTED DECORATIVE GAS APPLIANCE. DO NOT USE A FIREPLACE INSERT OR OTHER PRODUCTS NOT SPECIFIED FOR USE WITH THIS PRODUCT. IF DOORS ARE USED OPERATE FIREPLACE WITH DOORS FULLY OPEN OR CLOSED ONLY. WHEN BURNING A DECORATIVE GAS APPLIANCE IN THE FIREPLACE, ADJUST DAMPER TO THE FULLY OPEN POSITION.</small>				<small>WARNING! THIS FIREPLACE HAS NOT BEEN TESTED WITH AN UNVENTED GAS LOG SET. TO REDUCE THE RISK OF FIRE OR INJURY, DO NOT INSTALL AN UNVENTED GAS LOG SET INTO FIREPLACE. WARNING! THIS APPLIANCE IS NOT FOR USE AS COOKING EQUIPMENT.</small>		
<small>IF INSTALLATION OR OPERATING INSTRUCTIONS ARE MISSING CONTACT: HEARTH & HOME TECHNOLOGIES INC., 1915 W. SAUNDERS ST., MT. PLEASANT, IA 52641.</small>						

Note: An arrow (→) found in the text signifies change in content.

Safety Alert Key:

- **DANGER!** Indicates a hazardous situation which, if not avoided will result in death or serious injury.
- **WARNING!** Indicates a hazardous situation which, if not avoided could result in death or serious injury.
- **CAUTION!** Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
- **NOTICE:** Indicates practices which may cause damage to the fireplace or to property.

Table of Contents

Congratulations!	2	7 Installation of Fireplace	21
Warranty	4	A. Things to Consider	21
1 Listing and Code Approvals	6	B. Unpack the Fireplace (I60 only)	21
A. Appliance Certification	6	C. Secure the Fireplace (I60 only)	21
B. Non-Combustible Materials	6	D. Unpack the Fireplace (I80 only)	21
C. Combustible Materials	6	E. Position the Fireplace (I80 only)	22
		F. Install the Refractory (I80 only)	23
		G. Place Protective Metal Hearth Strips	24
		H. Level Fireplace	24
		I. Install Outside Air Kit	25
User Guide			
2 Operating Instructions	7	8 Chimney Assembly	26
A. Your Fireplace	7	A. Chimney Requirements	27
B. Seasoned Wood	8	B. Using Offsets/Returns	28
C. Starting a Fire	8	C. Assemble Chimney Sections	29
D. Grate	8	D. Install Chimney Air Kit	29
E. Firescreen	8	E. Install Ceiling Firestops	30
F. Flue Damper	8	F. Install Attic Insulation Shield	31
G. Refractory	8	G. Cut out Hole in Roof	32
H. Glass Doors	9	H. Complete Installation	32
I. Outside Air (optional)	9	I. Install Flashing	32
J. Vented Gas Log Sets & Gas Log Lighters	9	J. Chimney Termination Requirements	33
K. Optional Components	9		
L. Clear Space	9	9 Chase Installations	34
M. Wood Fuel	10	A. Construct the Chase	34
3 Maintenance and Service	11	B. Install Fireplace & Chimney	35
A. Disposal of Ashes	11	C. Install Chase Top	35
B. Chimney Inspection/Cleaning	11	D. Install Termination Cap	36
C. Check Firebox Refractory	12		
D. Inspect Grate	12	10 Shrouds	38
E. Glass Cleaning	12	A. Radiation Shield	38
4 Troubleshooting Guide	13	B. Field Constructed Shrouds	38
		11 Finishing	40
		A. Non-Combustible Materials	40
		B. Combustible Materials	40
		C. Hearth Extension	40
		D. Finishing Material	43
		E. Combustible Mantel	44
		F. Sidewalls/Surrounds	45
		12 Accessories	46
		A. Gas Log/Lighter Provision	46
		B. Wood Burning Inserts	46
		13 Reference Materials	47
		A. Fireplace Dimensions	47
		B. Optional Components	48
		C. Chimney Components	49
		D. Service Parts	54
		E. Contact Information	56
Installer Guide			
5 Getting Started	14		
A. Typical Fireplace System	14		
B. Design and Installation Considerations	15		
C. Draft	15		
D. Negative Pressure	15		
E. Locating Fireplace & Chimney	16		
F. Tools and Supplies Needed	17		
G. Fireplace System Requirements	17		
H. Inspect Fireplace and Components	17		
6 Framing & Clearances	18		
A. Select Fireplace Location	18		
B. Clearances	19		
C. Sidewalls/Surrounds	20		
D. Frame the Fireplace	20		

Warranty

Hearth & Home Technologies LIMITED WARRANTY

Hearth & Home Technologies ("HHT") and its respective brands extends the following warranty for HHT gas, wood, pellet and electric appliances purchased from an authorized HHT dealer and installed in the United States of America or Canada. Warranty starts with date of purchase by the original owner (End User) except as noted for replacement parts.

Warranty Period		HHT Manufactured Appliances and Venting						Components Covered
Parts	Labor	Gas	Wood	Pellet	EPA Wood	Electric	Venting	
1 Year		X	X	X	X	X	X	All Parts and Material Except as covered by Conditions, Exclusion, and Limitations listed
2 years				X	X			Igniters, Electronic Components, and Glass
		X	X	X	X			Blowers
			X					Molded Refractory Panels
3 years				X				Firepots
5 years	3 years			X	X			Castings & Baffles
7 years	3 years		X	X	X			Firebox, HHT Chimney, Termination & Heat Exchanger
10 years	1 year	X						Burners, Logs & Refractory
Limited Lifetime	1 year	X						Firebox & Heat Exchanger
90 Days		X	X	X	X	X	X	All Replacement Parts
See Conditions, Exclusions, and limitations. 9-01-08								

CONDITIONS, EXCLUSIONS & LIMITATION OF LIABILITY

- This warranty applies to the original owner and is transferable up to two years from date of purchase to the new homeowner, provided the purchase was made through an authorized dealer or distributor of HHT, and the appliance remains in its original place of installation.
- The maximum amount recoverable under this warranty is limited to the purchase price of the product.
- In no event shall HHT be liable for any incidental or consequential damages caused by defects in the product.
- Adjustments, regular maintenance, cleaning and temporary repairs, or the failure to duplicate the problem in the home is not covered under this warranty.

This limited warranty does not extend to or include surface finish on the appliance or terminations, door gasketing, glass gasketing, glass discoloration, firebrick, pellet logs, kaowool or other ceramic insulating materials. Rust and/or corrosion on any of the metal surfaces, cast iron components, baffles, supports, doors, or firebox area are not covered by this warranty.

- Noise resulting from minor expansion, contraction, or movement of certain parts is normal and complaints related to this noise are not covered by this warranty.
- HHT's obligation under this warranty does not extend to damages resulting from: (1) installation, operation or maintenance of the appliance not in accordance with the installation instructions; operating instructions and the listing agent identification label furnished with the appliance; (2) installation which does not comply with local building codes; (3) shipping, improper handling, improper operation, abuse, misuse, accident or unworkmanlike repairs; (4) environmental conditions, inadequate ventilation or drafting caused by tight sealing construction of the structure or handling devices such as exhaust fans or forced air furnaces or other such causes; (5) use of fuels other than those specified in the operating instructions; (6) installation or use of components not supplied with the appliance or any other components not expressly authorized and approved by HHT; and/or (7) modification of the appliance not expressly authorized and approved by HHT in writing.
- This warranty does not apply to non-HHT venting components, hearth components or other accessories used in conjunction with the installation of this product.
- This warranty is void if the appliance has been over-fired or operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals the appliance is subject to prolonged periods of dampness or condensation, or there is any damage to the appliance or other components due to water or weather damage which is the result of, but not limited to, improper chimney or venting installation.
- HHT's liability under this warranty is limited to the replacement and repair of defective components or workmanship during the applicable period. HHT may fully discharge all of its obligations under such warranties by repairing the defective component(s) at HHT's discretion. Shipping costs are not covered under this warranty.
- Some states do not allow exclusions or limitation of incidental or consequential damages, so those limitations may not apply to you. This warranty gives you specific rights; you may also have other rights, which vary from state to state.
- EXCEPT TO THE EXTENT PROVIDED BY LAW, HHT MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY SPECIFIED HEREIN. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO DURATION OF THE WARRANTY SPECIFIED ABOVE.

This Limited Warranty is effective on all HHT appliances sold after September 01, 2008 and supersedes any and all warranties currently in existence.

If warranty service is needed, you should contact your installing dealer. If the installing dealer is unable to provide necessary parts or components, contact the nearest authorized HHT dealer or supplier.

1 Listing and Code Approvals

A. Appliance Certification

This fireplace system has been tested and listed in accordance with UL 127 and ULC-S610 standards by Underwriters Laboratories Inc. for installation and operation in the United States and Canada.

This fireplace may be installed in sleeping rooms EXCEPT in manufactured homes. If installed with a gas log set, provisions for the National Fuel Gas Code must be met.

This fireplace has been tested and listed for use with the optional components specified in this manual. These optional components may be purchased separately and installed at a later date. Installation of an outside air kit will require significant reconstruction and is best if installed at the time of fireplace installation.

Heatilator is a registered trademark of Hearth & Home Technologies Inc.

WARNING! Risk of Fire! *Hearth & Home Technologies disclaims any responsibility for, and the warranty and agency listing will be voided by the following actions.*

DO NOT:

- *install or operate damaged fireplace*
- *modify fireplace*
- *install other than as instructed by Hearth & Home Technologies*
- *operate the fireplace without fully assembling all components*
- *overfire*
- *install an unvented gas log set*
- *install any component not approved by Hearth & Home Technologies*
- *install parts or components not Listed or approved*

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. For assistance or additional information, consult a qualified installer, service agency or your dealer.

NOTICE: *This fireplace is tested and approved as a decorative fireplace. It should not be factored as a primary heat source in residential heating calculations.*

B. Non-Combustible Materials

- Materials which will not ignite and burn, composed of any combination of the following:
 - Steel - Iron
 - Brick - Tile
 - Concrete - Slate
 - Glass - Plasters
- Materials reported as passing **ASTM E 136, Standard Test Method for Behavior of Metals, in a Vertical Tube Furnace at 750° C**

C. Combustible Materials

- Materials made of or surfaced with any of the following materials:
 - Wood - Compressed paper
 - Plant fibers - Plastic
- Any material that can ignite and burn; flame proofed or not, plastered or un-plastered

User Guide

2 Operating Instructions

WARNING



HOT SURFACES!

Glass and other surfaces are hot during operation AND cool down.

Hot glass will cause burns.

- **DO NOT** touch glass until it is cooled
- NEVER allow children to touch glass
- Keep children away
- CAREFULLY SUPERVISE children in same room as fireplace.
- Alert children and adults to hazards of high temperatures.

High temperatures may ignite clothing or other flammable materials.

- Keep clothing, furniture, draperies and other flammable materials away.

If you expect that children may come into contact with this fireplace, we recommend a barrier such as a decorative screen. See your dealer for suggestions.

A. Your Fireplace

WARNING! DO NOT operate fireplace before reading and understanding operating instructions. Failure to operate fireplace according to operating instructions could cause fire or injury.

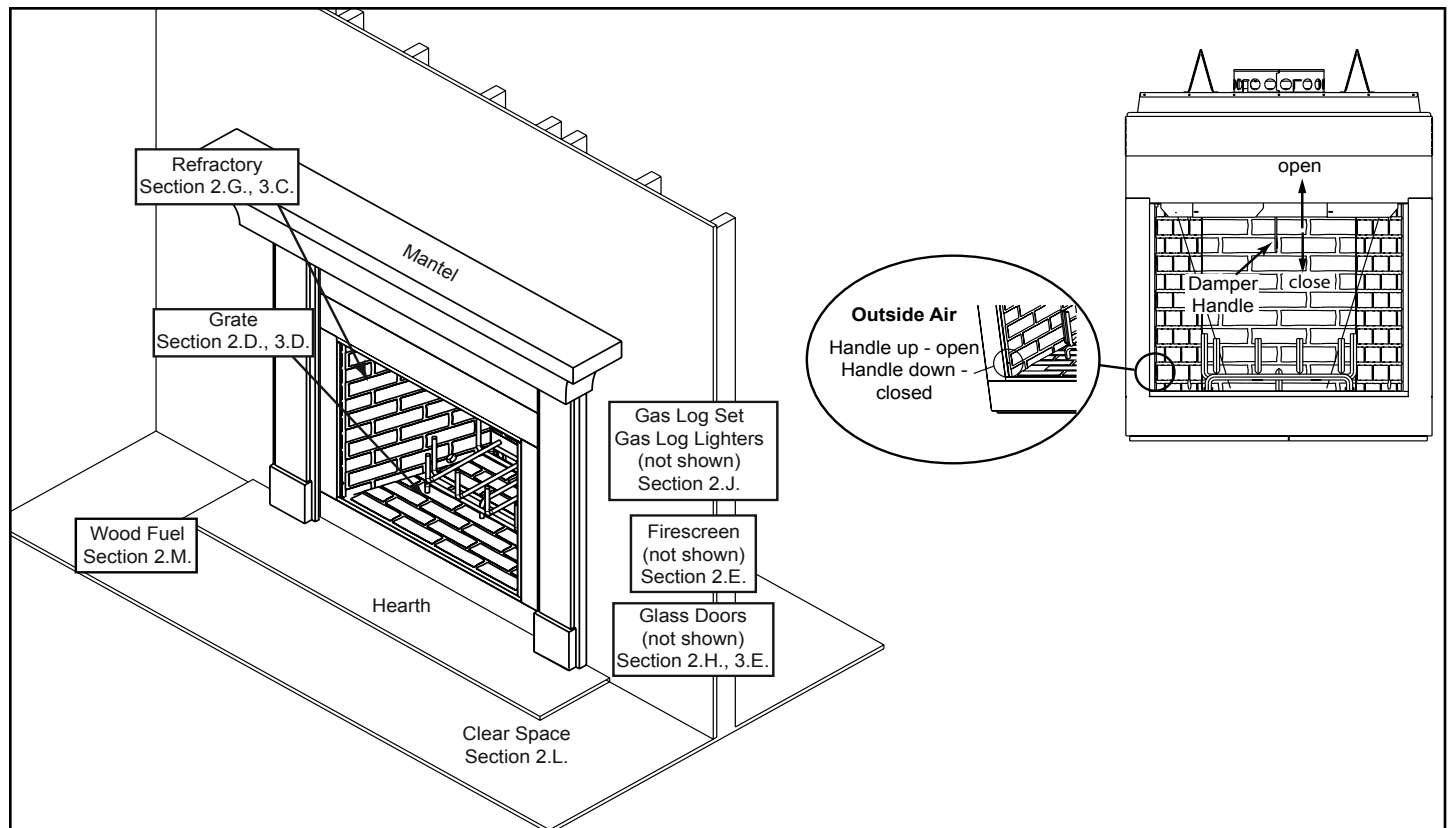


Figure 2.1 General Operating Parts

B. Seasoned Wood

Properly seasoned wood is important for successful operation of your fireplace. Most woodburning fireplace problems are caused by burning wet, unseasoned wood.

Seasoned firewood is wood that is cut to size, split and air dried to a moisture content of around 20%.

Imagine a wooden bucket that weighs about eight pounds. Fill it with a gallon of water, put it in the fireplace and try to burn it. This sounds ridiculous but that is exactly what you are doing if you burn unseasoned wood.

A tree cut down a year ago and not split is likely to have almost as high a moisture content now as it did when it was cut.

Please refer to Section 2.M. for more detail.

C. Starting a Fire

NOTICE: You must establish a good draft to prevent smoke spillage into the room.

WARNING! Risk of Fire! Keep combustible materials, gasoline and other flammable vapors and liquids clear of the fireplace.

DO NOT:

- store flammable materials close to the fireplace
- use gasoline, lantern fuel, kerosene, charcoal lighter fluid or similar liquids to start or “freshen up” a fire in this fireplace.

Keep all flammable liquids well away from the fireplace while it is in use. Combustible materials may ignite.

- The first three or four fires should be of moderate size to allow the oils and binders to be burned from the fireplace and the refractory and paint to cure. You may notice an industrial odor the first few fires. This is considered normal.
- Use well-seasoned wood.
- Open the flue damper to a fully open position.
- Place crumpled or twisted paper under the fireplace grate.
- Loosely arrange kindling or small pieces of wood to form a ‘tent’ on the fireplace grate.
- Pre-warm the flue to establish a draft to help reduce smoke spillage during start-up. Hold a rolled up piece of burning newspaper under the flue damper for a few moments.
- Light the crumpled paper to ignite the kindling.
- Add small pieces of wood until a hot bed of embers has been established.
- Add a minimum of three average size pieces of split firewood, placed to allow combustion air and flames between them.

CAUTION! Odors and vapors released during initial operation may be irritating to sensitive individuals.
Open windows for air circulation.

D. Grate

This fireplace is designed to be used with the grate supplied with this unit or one approved by HHT. The grate will break down over time and will need occasional replacement.

WARNING! Risk of Fire! Use only the factory-supplied integral grate.

- Keeps logs in place.
- Allows proper air circulation around the fire.

E. Firescreen

The firescreen is provided to control sparks. Keep it closed when the fireplace is in use.

WARNING! Risk of Fire or Burns!

- Screen will not prevent burning materials from falling out.
- Screen pulls or handles may be hot.

F. Flue Damper

- Refer to Figure 2.1 for location of control.
- Must be in fully open position (handle up toward the top of the fireplace) during operation of the fireplace.
- Before lighting the fireplace, verify fully open position by looking up from the inside of the fireplace.

WARNING! Risk of Fire and Asphyxiation! Open damper prior to operating fireplace. A closed damper overfires the fireplace and spills smoke and flames into the room.

G. Refractory

- The refractory is supplied to contain heat and provide an attractive interior.
- It will break down over time and will need occasional replacement. Small hairline cracks and discoloration are normal and do not affect its safety.
- (See refractory maintenance Section 3.C.)

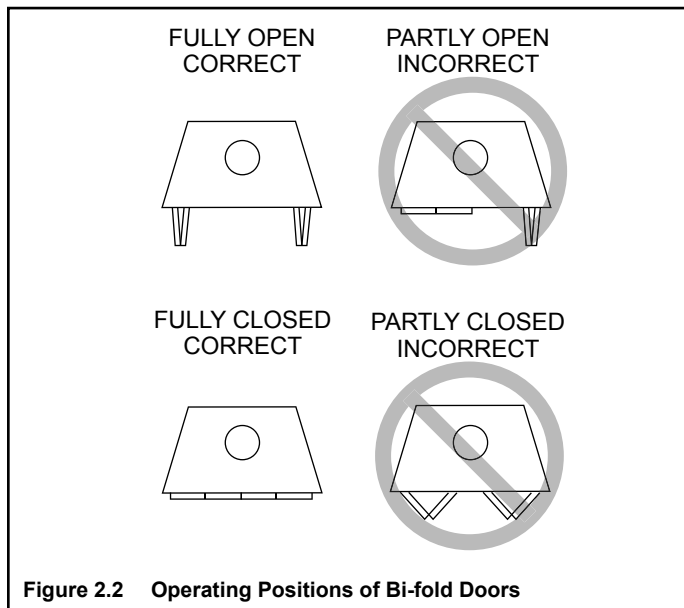
WARNING! Risk of Fire! DO NOT burn fireplace without refractory. Use only refractory supplied by Hearth & Home Technologies, Inc.

H. Glass Doors

- Glass doors are optional.
- Refer to Figure 2.2 for how to properly use them.

WARNING! Risk of Fire! Install **ONLY** doors approved by Hearth & Home Technologies, Inc.

WARNING! Risk of Fire and Smoke! Fireplaces equipped with doors should be operated only with doors fully open or doors fully closed. If doors are left partly open, gas and flame may be drawn out of the fireplace opening.



I. Outside Air (optional)

The outside air kit supplies some combustion air for your fireplace. It may help reduce the effects of negative air pressure. (See Section 5.D.)

- Refer to Figure 2.1 for location of control
- Close the inlet to prevent cold drafts when the fireplace is not being used.

CAUTION! Risk of Burns! The outside air control handle is **HOT** when fireplace is in operation. Adjust **BEFORE** lighting fire.

J. Vented Gas Log Sets & Gas Log Lighters

- Optional
- Vented gas logs or gas log lighters can be installed in this fireplace. Follow the instructions provided with the accessory for operation.

WARNING! Risk of Fire or Asphyxiation!

- **DO NOT** install unvented gas logs.
- Damper must be locked open.
- Gas flame may generate fumes.

K. Optional Components

- Other options may be available
- Consult your dealer/distributor

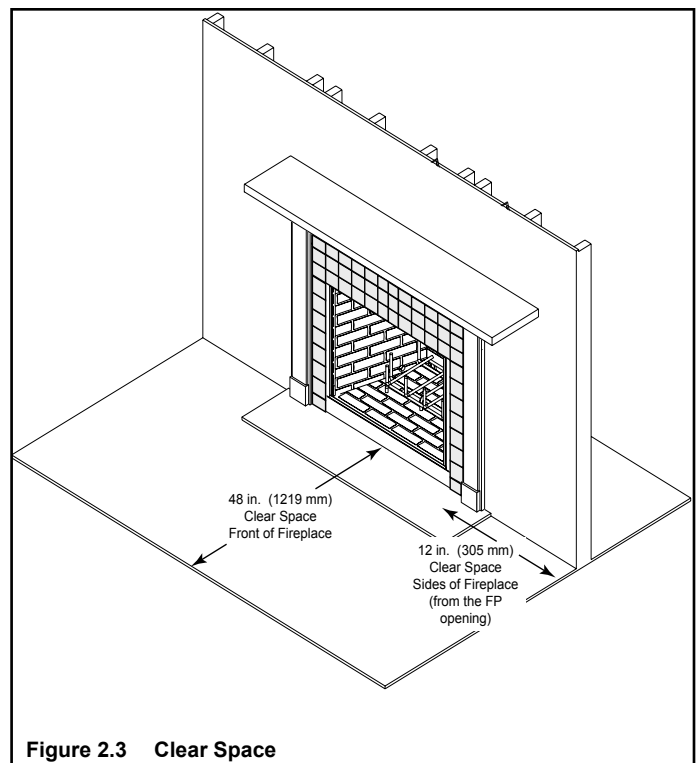
WARNING! Risk of Fire! DO NOT install and or use any component not approved by Hearth & Home Technologies Inc.

L. Clear Space

- Do not place combustible objects within areas indicated in Figure 2.3.

WARNING! DO NOT place combustible objects in front of the fireplace. High temperatures may ignite clothing, furniture or draperies.

- Mantel - avoid placing candles and other heat-sensitive objects on mantel or hearth. Heat may damage these objects.



M. Wood Fuel

Hardwood vs Softwood

Your fireplace performance depends on the quality of the firewood you use.

- Seasoned wood contains about 8,000 BTUs per pound.
- Hard woods are more dense than soft woods.
- Hard woods contain 60% more BTUs than soft woods.
- Hard woods require more time to season, burn slower and are harder to ignite.
- Soft woods require less time to dry, burn faster and are easier to ignite.
- Start the fire with soft wood to bring the fireplace up to operating temperature and to establish draft.
- Add hard wood for slow, even heat and longer burn time.

Soft woods	Hard woods
<ul style="list-style-type: none">• Douglas Fir• Pine• Spruce• Cedar• Poplar• Aspen• Alder	<ul style="list-style-type: none">• Oak• Maple• Apple• Birch

Moisture

WARNING! Risk of Fire!

- **DO NOT** burn wet or green wood.
- Wet, unseasoned wood can cause accumulation of creosote.

The majority of the problems fireplace owners experience are caused by trying to burn wet, unseasoned wood.

- Wet, unseasoned wood requires energy to evaporate the water instead of heating your home, and
- Evaporating moisture cools your chimney, accelerating formation of creosote.

Seasoned Wood

- Cut logs to size
- Split to 6 in. (152 mm) or less
- Air dry to a moisture content of around 20%
 - Soft wood - about nine months
 - Hard wood - about eighteen months

NOTICE: Seasoning time may vary depending on drying conditions.

Storing Wood

Steps to ensure properly seasoned wood:

- Stack wood to allow air to circulate freely around and through woodpile.
- Elevate wood pile off ground to allow air circulation underneath.
- Smaller pieces of wood dry faster. Any piece over 6 in. (152 mm) in diameter should be split.
- Wood (whole or split) should be stacked so both ends of each piece are exposed to air. More drying occurs through the cut ends than the sides.
- Store wood under cover to prevent water absorption from rain or snow. Avoid covering the sides and ends completely.

WARNING! Fire Risk! DO NOT store wood:

- In front of the fireplace.
- In space required for loading or ash removal.

Processed Solid Fuel Firelogs

Manufactured firelogs may be used with this fireplace. Hearth & Home Technologies Inc. recommends the use of UL Classified processed fuel firelogs. Follow the manufacturer's lighting and safety instructions.

Using firelogs may require more frequent chimney inspection and cleaning.

Do not poke or stir the logs while they are burning. Use only firelogs that have been evaluated for the application in manufactured fireplaces and refer to firelog warnings and caution markings on packaging prior to use.

3 Maintenance and Service

A. Disposal of Ashes

Frequency: When they reach bottom of grate

By: Homeowner

WARNING! Risk of Fire! Ashes could contain hot embers.

- Place ashes in a metal container with a tight-fitting lid.
- The closed container should be placed on a noncombustible floor or on the ground, well away from all combustible materials, pending final disposal.
- If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.

B. Chimney Inspection/Cleaning

Frequency: At least twice a year during heating season or as recommended by a certified chimney sweep

By: Certified chimney sweep

WARNING! Risk of Fire! Ignited creosote is extremely HOT. Prevent creosote buildup.

Refer to Figure 3.1 to remove/reinstall termination caps.

Creosote - Formation and Need for Removal

When wood is burned slowly, it produces tar and other organic vapors, which combine with expelled moisture to form creosote. The creosote vapors condense in the relatively cool chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited this creosote makes an extremely hot fire.

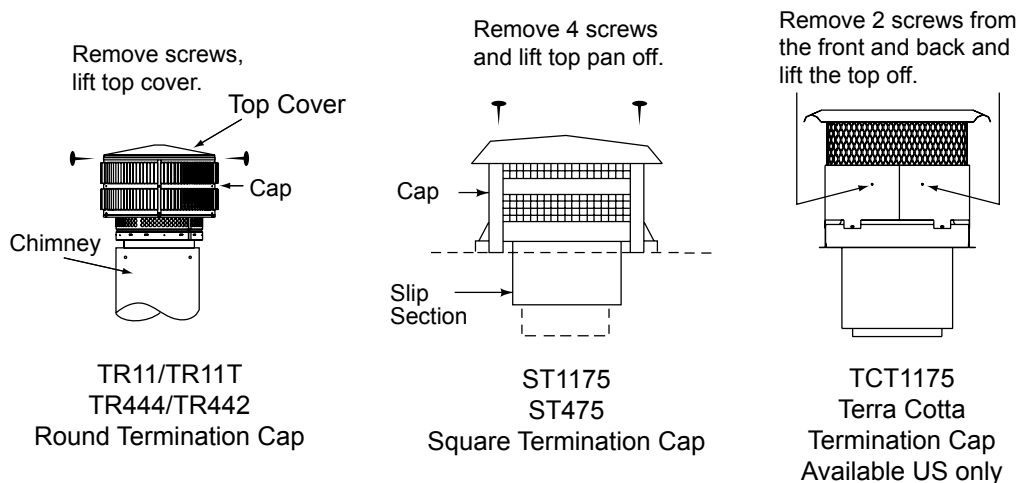
WARNING! Risk of Fire! A chimney fire can permanently damage your chimney system and nearby structures.

In the event of a chimney fire, Hearth & Home Technologies Inc. recommends

- replacement of the chimney, and
- inspection of the adjacent structure to the provisions of NFPA Level III inspection criteria.

The chimney shall be inspected at least twice a year during the heating season to determine when a creosote buildup has occurred.

When creosote has accumulated it shall be removed to reduce the risk of a chimney fire.



→ Figure 3.1 Chimney & Termination Cap Cleaning

C. Check Firebox Refractory

Frequency: After each ash removal

By: Homeowner

WARNING! Risk of Fire! *Inspect fireplace refractory. Crumbling, deteriorated refractory can allow overheating of surrounding materials.*

Expansion and contraction will cause minor cracking of the refractory. This is normal. The refractory will require periodic replacement depending on use.

The panels should be replaced if

- Cracks exceed ¼ inch (6 mm) in width,
- Metal is exposed behind the refractory,
- Large pieces of refractory fall out.

D. Inspect Grate

Frequency: After each ash removal

By: Homeowner

Inspect grate for:

- Warping or sagging 1-1/2 in. (38 mm) or more
- Broken welds
- Burn-through of grate bars

For safe operation, replace only with an approved grate from Hearth & Homes Technologies Inc.

E. Glass Cleaning

Frequency: As desired

By: Homeowner

CAUTION! *Handle glass assembly with care. Glass is breakable.*

- *Avoid striking, scratching or slamming glass*
- *Avoid abrasive cleaners*
- **DO NOT** *clean glass while it is hot*

Clean glass with a non-abrasive commercially available cleaner or ashes:

- Light deposits
 - Use household glass cleaner
- Heavy deposits
 - Use wood ash on damp cloth or,
 - Use commercial fireplace glass cleaner (consult with your dealer)

4 Troubleshooting Guide

Start Fire Problems	Possible Cause	Solution
Can't get fire started Excessive smoke or spillage Burns too slowly Smolders, sizzles	Not enough kindling/paper or no kindling/paper	Use dry kindling, more paper. Arrange kindling & wood for air movement.
	Damper closed/not fully open	Open damper.
	Not enough air for fire to ignite	Check for restricted cap/shroud.
		Open air kit (if installed).
		Check for flue blockage.
		Pre-warm flue before starting fire (refer to starting fire section).
		Check for adequate vent height (refer to chimney assembly section).
		Open window below the fireplace towards the wind.
	Wood condition is too wet, too large	Use dry, seasoned wood (refer to wood fuel section).
	Bed of coals not established before adding wood	Start with paper & kindling to establish bed of coals (refer to starting fire section).
	Flue blockage such as birds' nests or leaves in termination cap	Have chimney inspected for creosote and cleaned by a certified chimney sweep.
Fire burns too fast	Down draft or negative pressure Competition with exhaust devices	Do not use exhaust fans during start-up (refer to negative pressure section).
		Open window below the fireplace towards the wind.
	Extremely dry or soft wood	Mix in hardwood.
		Mix in less seasoned wood after fire is established (refer to wood fuel section).
	No glass doors	Add glass doors to slow down air flow.
	Overdrafting	Check for correct vent height; too much vertical height creates overdrafting.
		Check location of vent termination (refer to chimney assembly section).

Installer Guide

5 Getting Started

A. Typical Fireplace System

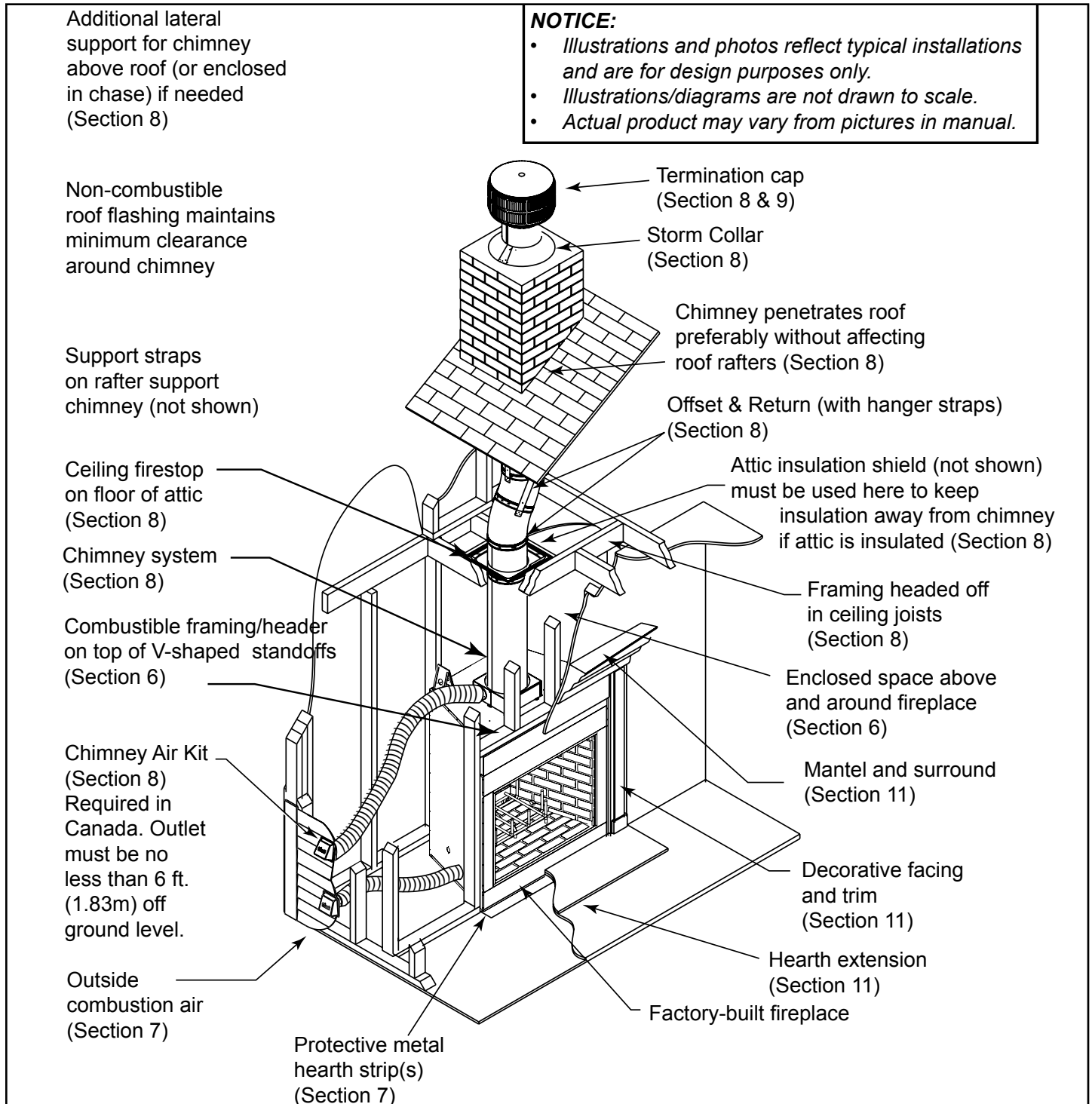


Figure 5.1 Typical Fireplace System

B. Design and Installation Considerations

NOTICE: Check building codes prior to installation.

- Installation MUST comply with local, regional, state and national codes and regulations.
- Consult insurance carrier, local building inspector, fire officials or authorities having jurisdiction over restrictions, installation inspection and permits.

Before installing, determine the following:

- Where the fireplace is to be installed
- The vent system configuration to be used
- Gas supply piping
- Electrical wiring
- Framing and finishing details
- Whether optional accessories—devices such as a fan, wall switch or remote control—are desired

NOTICE: Junction box should be installed during initial setup to avoid major reconstruction.

C. Draft

Draft is the pressure difference needed to vent fireplaces successfully. When a fireplace is drafting successfully, all combustion byproducts are exiting the home through the chimney.

Considerations for successful draft include:

- Preventing negative pressure
- Location of fireplace and chimney

NOTICE: Hearth & Home Technologies assumes no responsibility for the improper performance of the fireplace system caused by:

- Inadequate draft due to environmental conditions
- Downdrafts
- Tight sealing construction of the structure
- Mechanical exhausting devices
- Improper location of the chimney

D. Negative Pressure

WARNING! Risk of Asphyxiation! Negative pressure can cause spillage of combustion fumes and soot. Fire must draft properly for safe operation.

Negative pressure results from the imbalance of air available for the fireplace to operate properly. It can be strongest in lower levels of the house.

Causes include:

- Exhaust fans (kitchen, bath, etc.)
- Range hoods
- Combustion air requirements for furnaces, water heaters and other combustion appliances
- Clothes dryers
- Location of return-air vents to furnace or air conditioning
- Imbalances of the HVAC air handling system
- Upper level air leaks such as:
 - Recessed lighting
 - Attic hatch
 - Duct leaks

To minimize the effects of negative air pressure:

- Install the outside air kit with the intake facing prevailing winds during the heating season
- Ensure adequate outdoor air for all combustion appliances and exhaust equipment
- Ensure furnace and air conditioning return vents are not located in the immediate vicinity of the fireplace
- Avoid installing the fireplace near doors, walkways or small isolated spaces
- Recessed lighting should be a “sealed can” design
- Attic hatches weather stripped or sealed
- Attic mounted duct work and air handler joints and seams taped or sealed
- Basement installations should be avoided

NOTICE: Hearth & Home Technologies Inc. recommends the use of direct vent fireplaces in basements.

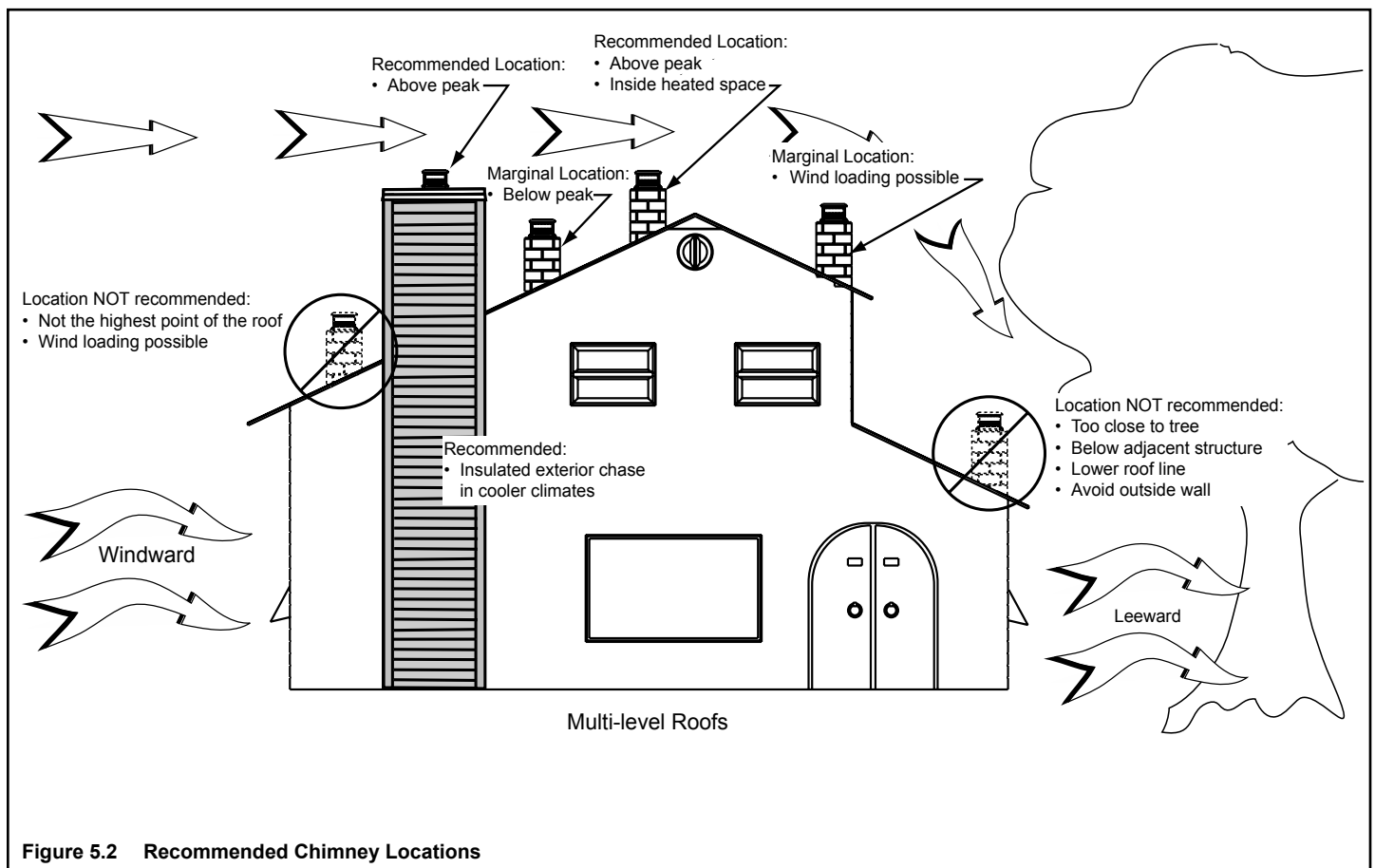
E. Locating Fireplace & Chimney

Location of the fireplace and chimney will affect performance.

- Install within the warm airspace enclosed by the building envelope. This helps to produce more draft, especially during lighting and die-down of the fire.
- Penetrate the highest part of the roof. This minimizes the effects of wind loading.
- Locate termination cap away from trees, adjacent structures, uneven roof lines and other obstructions.
- Minimize the use of chimney offsets.
- Consider the fireplace location relative to floor and ceiling and attic joists.
- Take into consideration the termination requirements in Section 8 and Section 9.

NOTICE: Locating the fireplace in a basement or in a location of considerable air movement can cause intermittent smoke spillage from fireplace. Do not locate fireplace near

- frequently open doors
- central heat outlets or returns



F. Tools and Supplies Needed

Before beginning the installation be sure the following tools and building supplies are available:

Reciprocating saw	Framing material
Pliers	Non-combustible sealant
Hammer	Gloves
Phillips screwdriver	Framing square
Flat blade screwdriver	Electric drill and bits
Plumb line	Safety glasses
Level	Tape measure
1/2-3/4 in. length, #6 or #8 self-drilling screws	
Misc. screws and nails	

G. Fireplace System Requirements

This fireplace system requires:

- Hearth Refractory
- Grate Assembly
- Outside Air Hood
 - Duct must be installed, but sold separately.

H. Inspect Fireplace and Components

WARNING! Risk of Fire and/or Explosion! Damaged parts could impair safe operation. DO NOT install damaged, incomplete or substitute components. Keep fireplace dry.

- Remove fireplace and components from packaging (please refer to Section 7) and inspect for damage.
- Vent system components and doors are shipped in separate packages.
- Report to your dealer any parts damaged in shipment.
- **Read all the instructions before starting the installation. Follow these instructions carefully during the installation to ensure maximum safety and benefit.**

6 Framing & Clearances

A. Select Fireplace Location

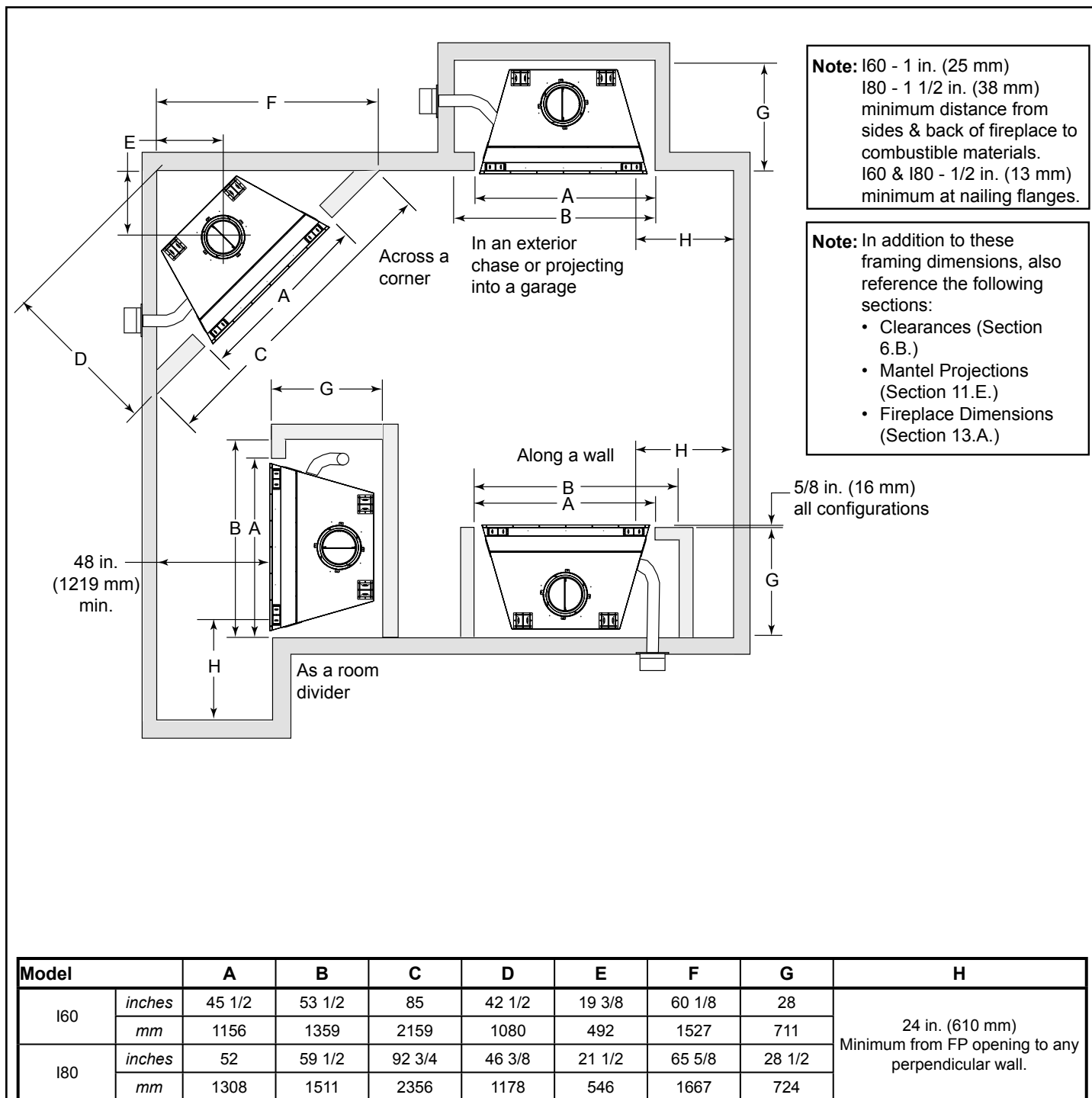
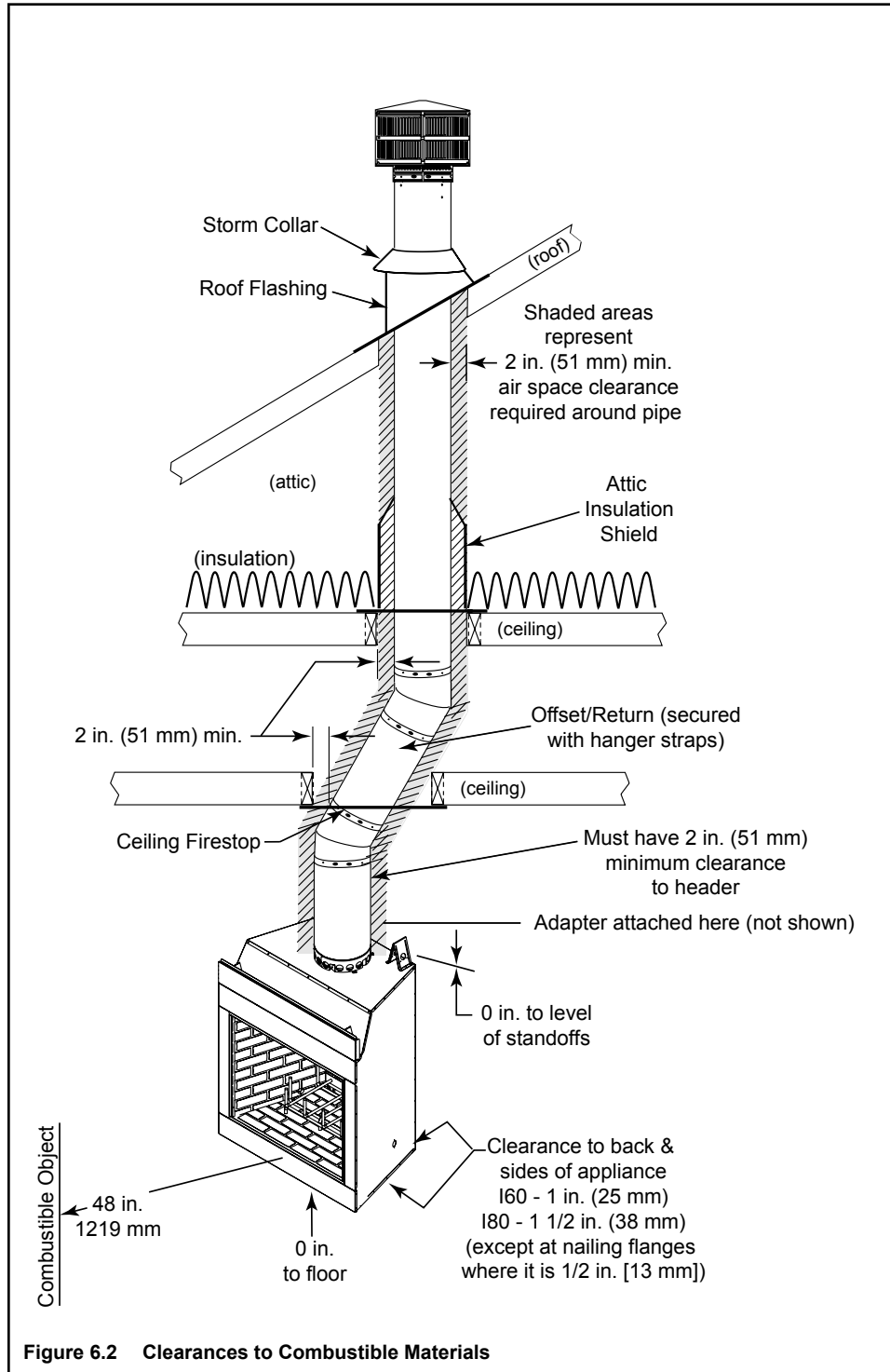


Figure 6.1 Fireplace Locations (Framing dimensions shown)

B. Clearances

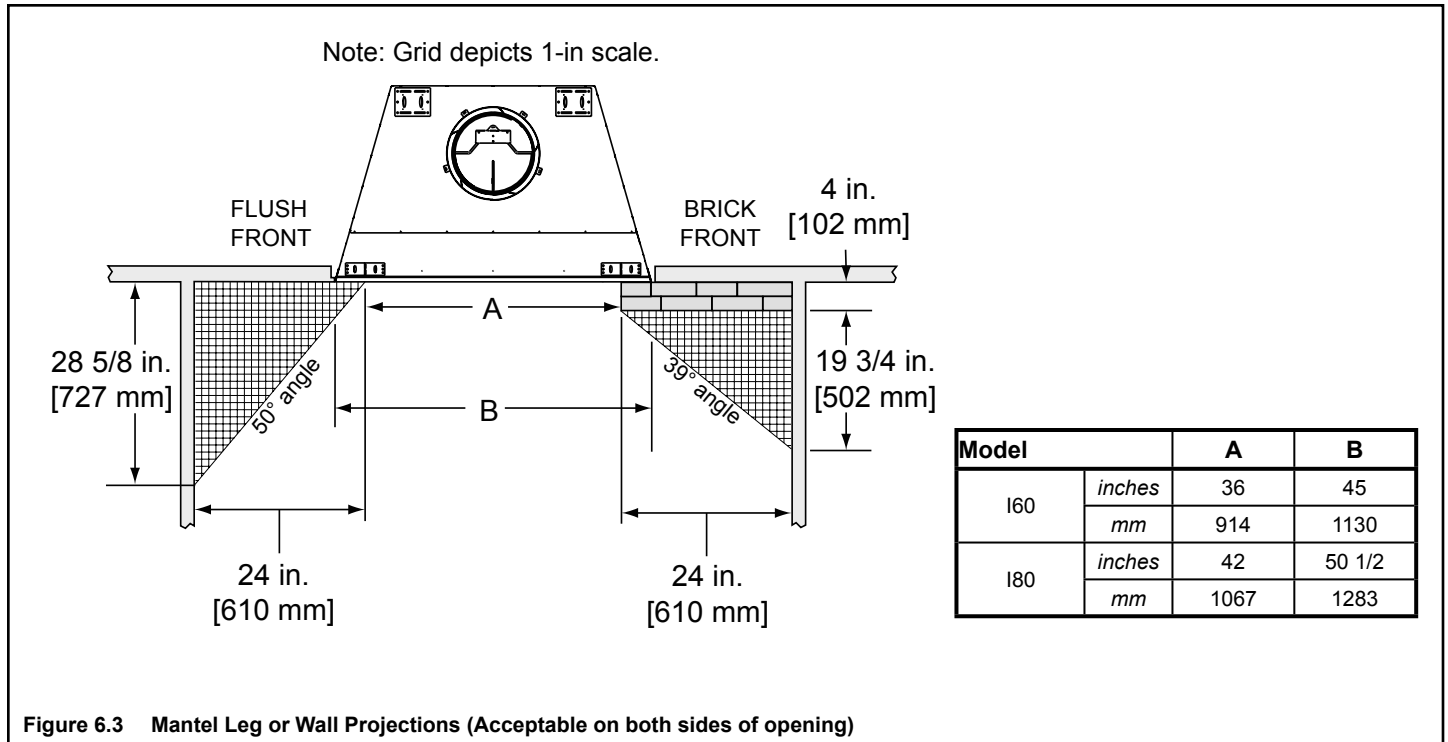
WARNING! Risk of Fire! You must comply with all minimum air space clearances to combustibles as specified in Figure 6.2. **DO NOT** pack required air spaces with insulation or other materials.



Note: Chimney air kit and 11-10 in./279-254 mm adapter are not shown, but are required in Canada.

C. Sidewalls/Surrounds

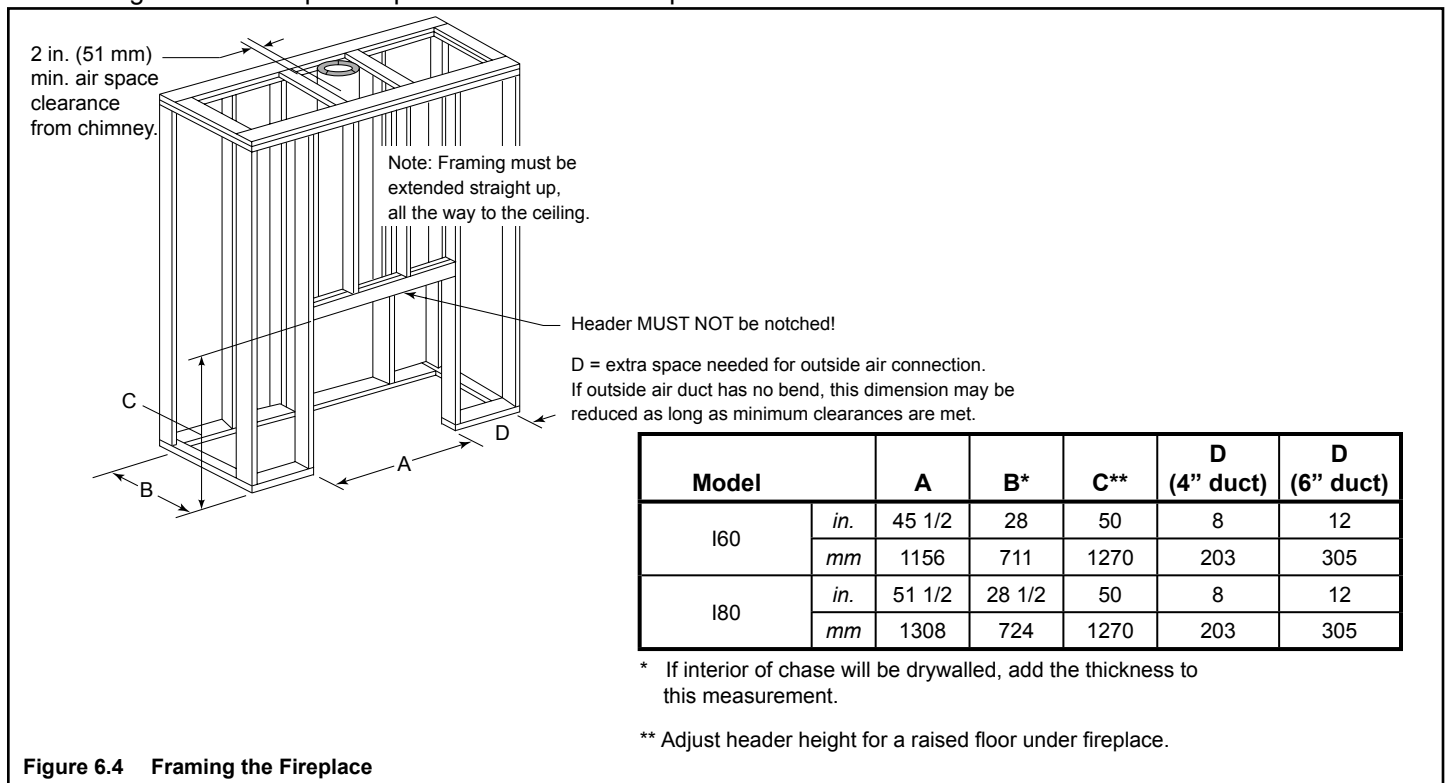
- Adjacent combustible sidewalls must be located a minimum 24 in. (610 mm) from the fireplace opening.
- Combustible and noncombustible mantel legs, surrounds and stub walls may be constructed within the gridded area, Figure 6.3.



D. Frame the Fireplace

Figure 6.4 shows typical framing using combustible materials (2x4 lumber shown).

- Observe all required air space clearances to combustible materials as shown in Figure 6.1 & 6.2.
- Framing across the top of fireplace must be above top standoffs.



7 Installation of Fireplace

CAUTION! Risk of Cuts/Abrasions. Wear protective gloves and safety glasses during installation. Sheet metal edges are sharp.

A. Things to Consider

- Location of chimney air kit
- Location(s) of outside air kit
- Electrical connections and/or wall switch
- Gas line piping

B. Unpack the Fireplace (I60 only)

- I60 is shipped with refractory in place.
- Remove packaging.
- Remove shipping brackets as shown in Figure 7.8. Replace the screws removed from the fireplace.
- Remove I60 from pallet and set in place.

C. Secure the Fireplace (I60 only)

WARNING! Risk of Fire! Prevent contact with sagging, loose insulation.

- **DO NOT** install against vapor barriers or exposed insulation.
- Secure insulation and vapor barriers.
- Provide minimum air space clearances at the sides and back of the fireplace assembly as outlined in Section 6.
- Place the fireplace on a continuous flat surface.
- Follow framing instructions in Section 6.
- Slide fireplace into position (brackets can be used to anchor fireplace in position).
- Skip to Section 7.G. for further I60 instructions.

D. Unpack the Fireplace (I80 only)

- Remove back refractory from outside of fireplace by bending tabs up and lifting refractory out of brackets. See Figure 7.1.



Figure 7.1 Unpacking Back Refractory

- Bend tabs back down out of the way. See Figure 7.2. Do not remove screws or brackets from fireplace. If brackets are removed, fill holes in outer shell with screws.
- Repeat this process to remove side refractories.



Figure 7.2 Bending Refractory Shipping Tabs Back Down

- Remove smoke shield by removing five screws. See Figure 7.3. Smoke shield is located at top of fireplace front.
- Remove screens by removing screw from the end of each screen rod. See Figure 7.4.

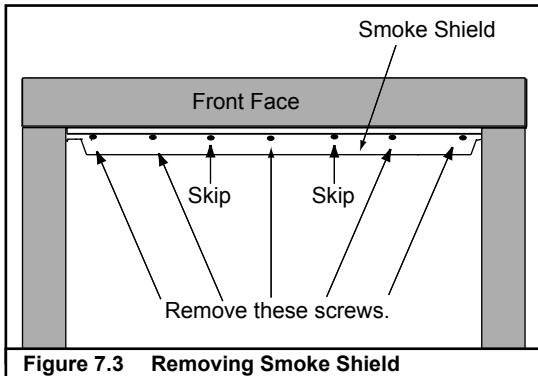


Figure 7.3 Removing Smoke Shield

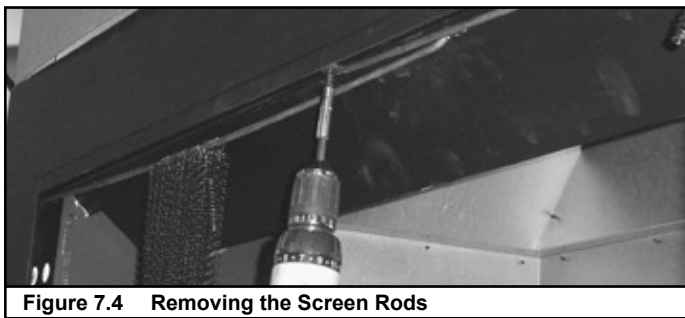


Figure 7.4 Removing the Screen Rods

- Remove hearth stone by removing three corrugated shipping spacers (Figure 7.5). Lift hearth stone out of fireplace. See Figure 7.6.

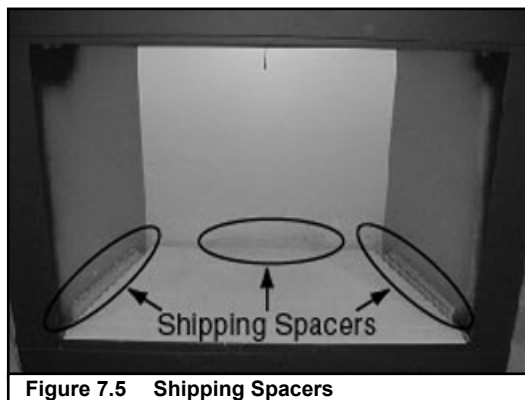


Figure 7.5 Shipping Spacers

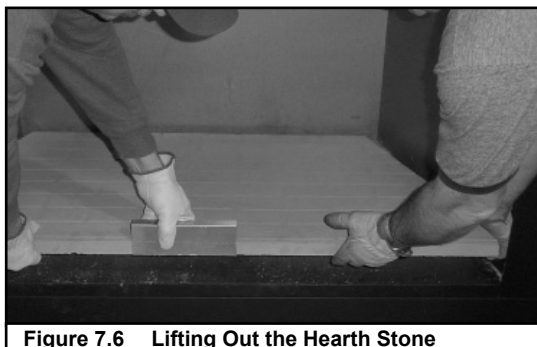


Figure 7.6 Lifting Out the Hearth Stone

WARNING! Risk of Fire! Prevent contact with sagging, loose insulation.

- **DO NOT** install against vapor barriers or exposed insulation.
- Secure insulation and vapor barriers.
- Provide minimum air space clearances at the sides and back of the fireplace assembly as outlined in Section 6.
- Remove fireplace from pallet.
The fireplace is attached to pallet with two brackets on each side and rear of outer shell. See Figure 7.7.
- Remove screws from bracket, pallet and fireplace. Replace screws removed from fireplace.



Figure 7.7 Removing Shipping Brackets

E. Position the Fireplace (I80 only)

- Place the fireplace on a continuous flat surface.
- Follow framing instructions in Section 6.
- Slide fireplace into position (brackets can be used to anchor fireplace in position).

Note: Before installing refractories and hearth stone, be sure all back edges of each piece are smooth to ensure proper fit. Scrape away excess with a regular screwdriver. See Figure 7.8.

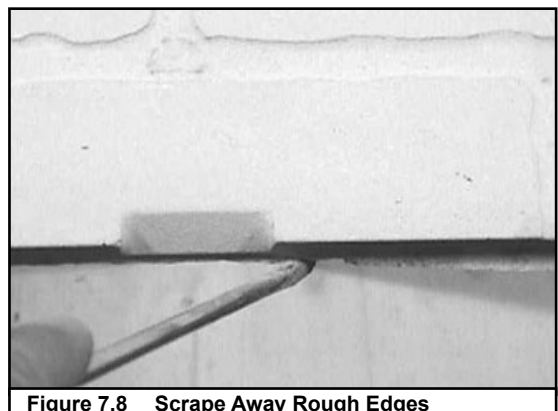


Figure 7.8 Scrape Away Rough Edges

F. Install the Refractory (I80 only)

We recommend two installers for hearth stone and refractory installation!

- Set back refractory into place, making sure refractory is centered and notches are to the bottom of firebox.
- Place grate brackets in outer two notches of refractory. See Figure 7.9.
- Secure back refractory in place with a screw and bracket supplied in hardware package. See Figure 7.10.

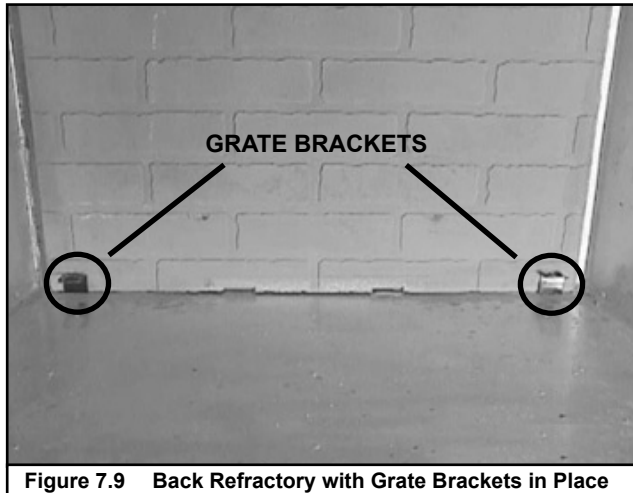


Figure 7.9 Back Refractory with Grate Brackets in Place

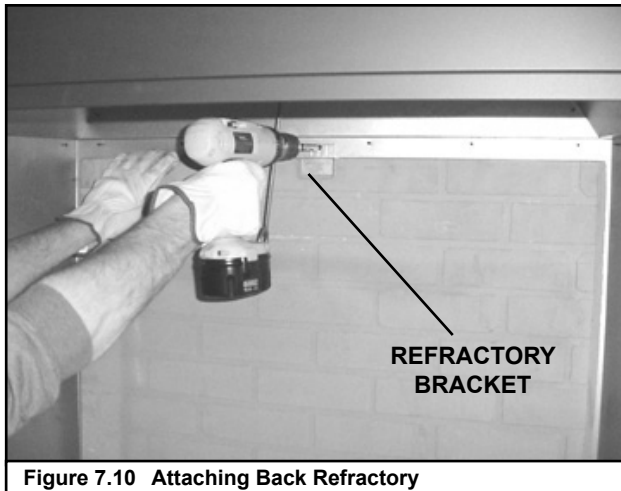


Figure 7.10 Attaching Back Refractory

Note: To ensure proper installation, gas knockouts in the side refractory should be positioned towards back of fireplace. See Figure 7.11.

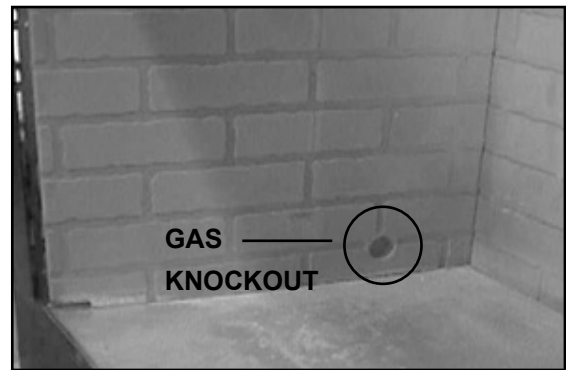


Figure 7.11 Gas Knockout

- Tilt top of side refractory towards center of firebox when placing it into fireplace. Push side refractory towards back corner of fireplace until it fits tightly against back refractory.
- Secure side refractory in place with a screw and bracket provided in the hardware package.
- Repeat these two steps for installation of the other side refractory.
- When placing hearth stone into fireplace, slide it back until it fits tightly against back refractory (underneath grate brackets). See Figure 7.12.

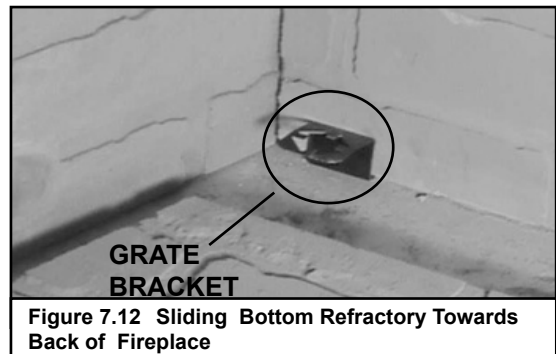


Figure 7.12 Sliding Bottom Refractory Towards Back of Fireplace

- Place grate into grate brackets. See Figure 7.13.
- Replace smoke shield.

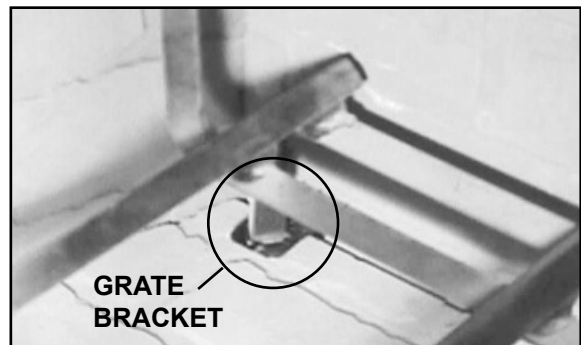


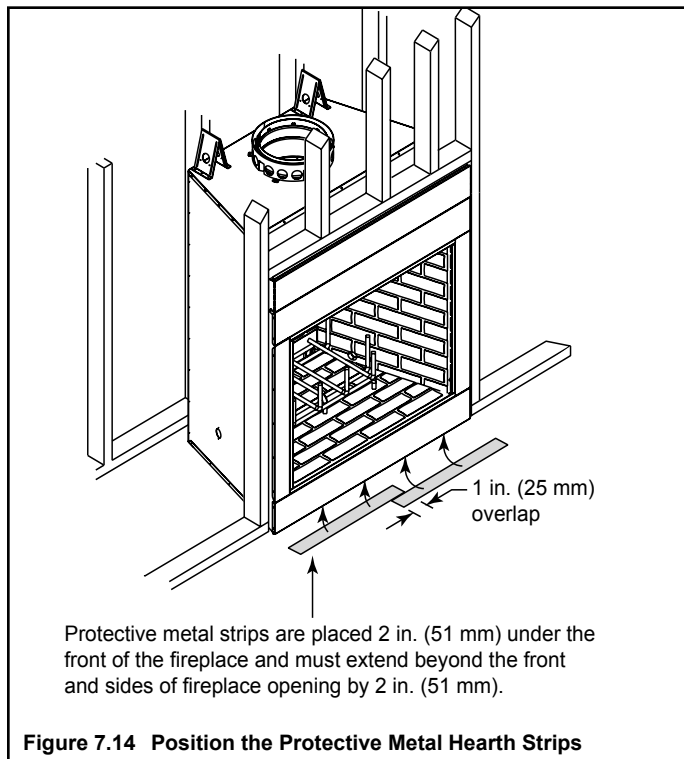
Figure 7.13 Grate Secured in Grate Bracket

- Replace left and right screens.

G. Place Protective Metal Hearth Strips

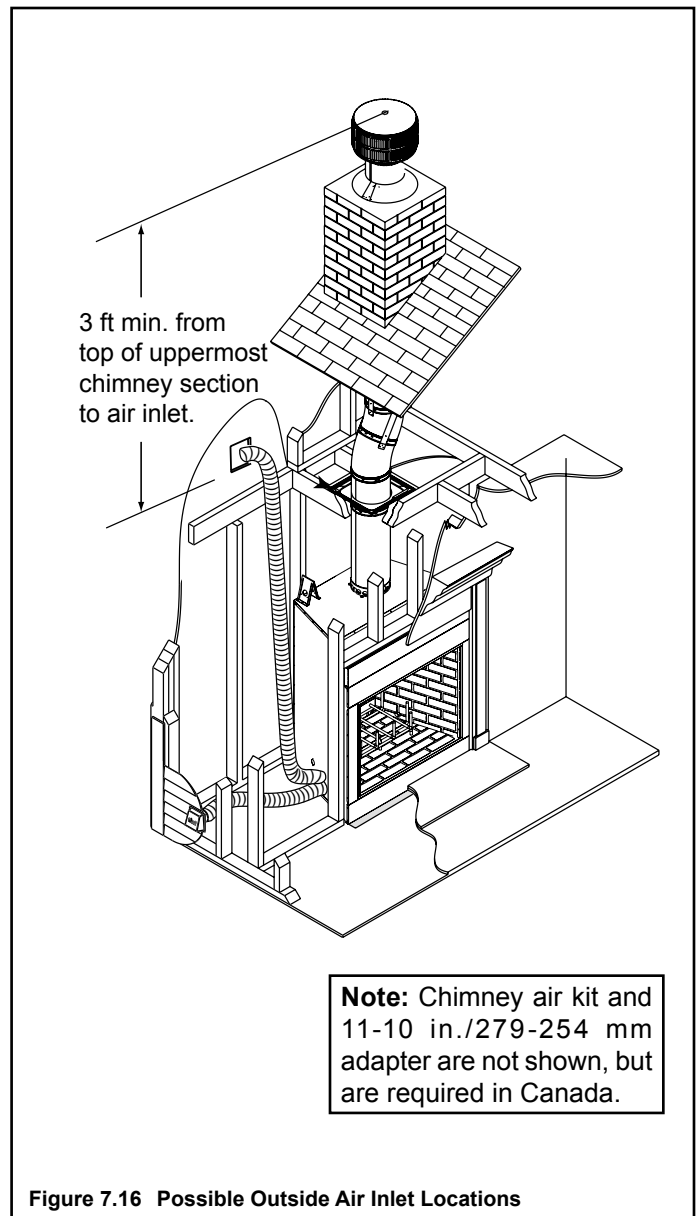
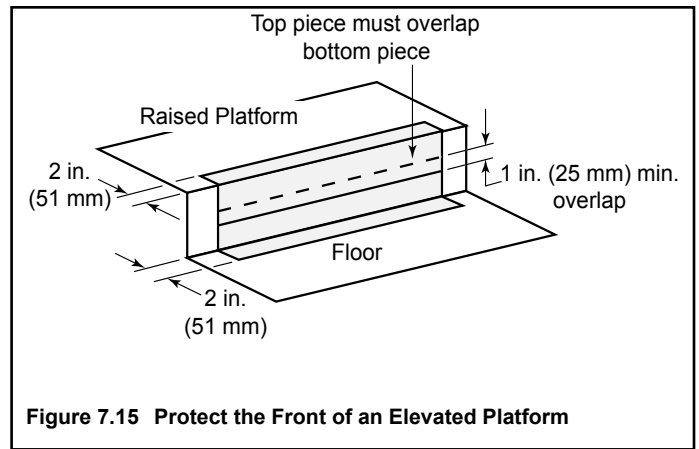
WARNING! Risk of Fire! Protective metal hearth strips **MUST** be installed. **DO NOT** cover metal strips with combustible materials. Sparks or embers may ignite flooring.

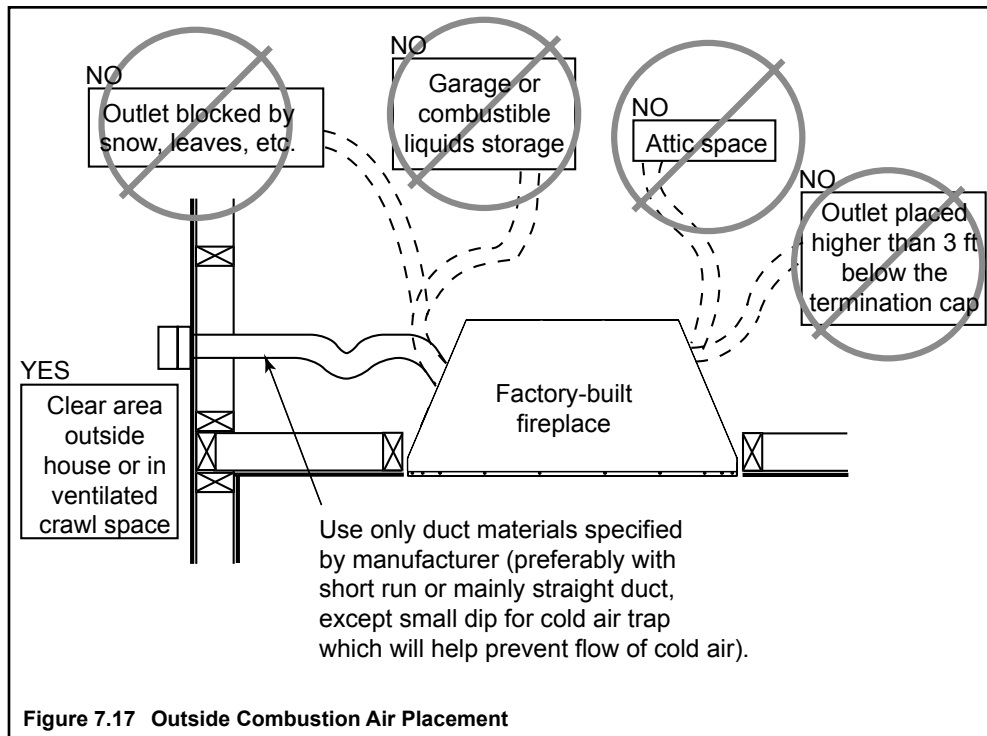
- Refer to Figures 7.14 and 7.15.
- Locate the two protective metal hearth strips measuring approximately 26 in. x 4 in. (660 mm x 102 mm) included with this fireplace.
- Slide each metal strip 2 in. (51 mm) under front edge of fireplace.
- Overlap strips in the middle of fireplace opening by 1 in. (25 mm) minimum..
- Metal strips must extend beyond the front and sides of the fireplace opening by at least 2 in. (51 mm).
- Protect the front of a platform elevated above the hearth extension with metal strips (not included with fireplace) per Figure 7.16. See Section 11 for hearth extension instructions.



H. Level Fireplace

- Level fireplace side-to-side and front-to-back.
- Shim with non-combustible material as necessary.
- Secure fireplace to framing with nailing flanges with a minimum of two fasteners per nailing flange.
- Check fireplace opening for square to ensure proper fit of glass doors. Measure diagonals of fireplace opening to make sure they are equal.



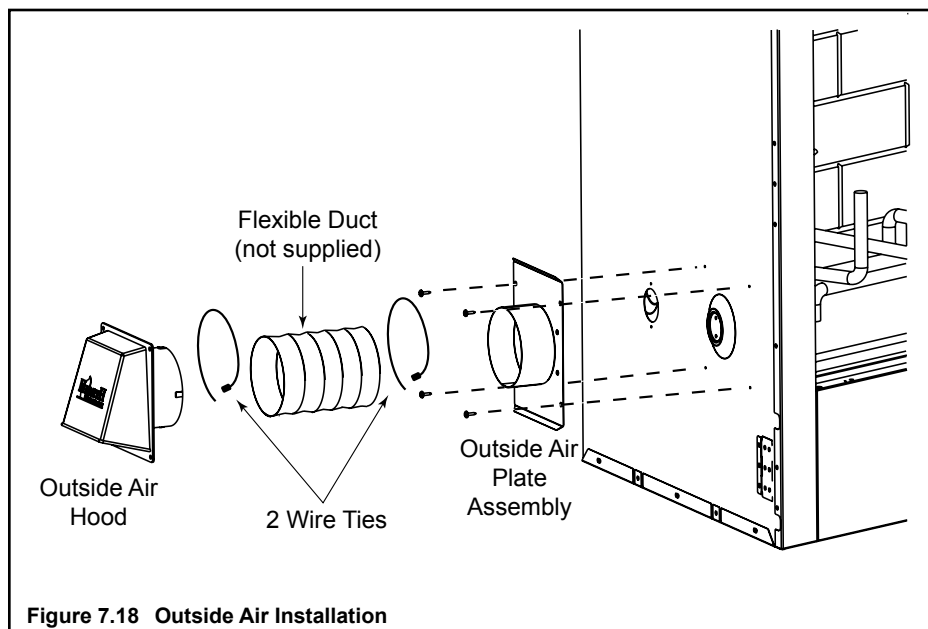


I. Install Outside Air Kit

CAUTION! Risk of Fire or Asphyxiation! DO NOT draw outside combustion air from wall, floor or ceiling cavity, or enclosed spaces such as an attic or garage.

- **DO NOT** place outside air hood close to exhaust vents or chimneys. Fumes or odor could be drawn into the room through the fireplace.
- Locate outside air inlet to prevent blockage from leaves, snow/ice, or other debris. Blockages could cause combustion air starvation.

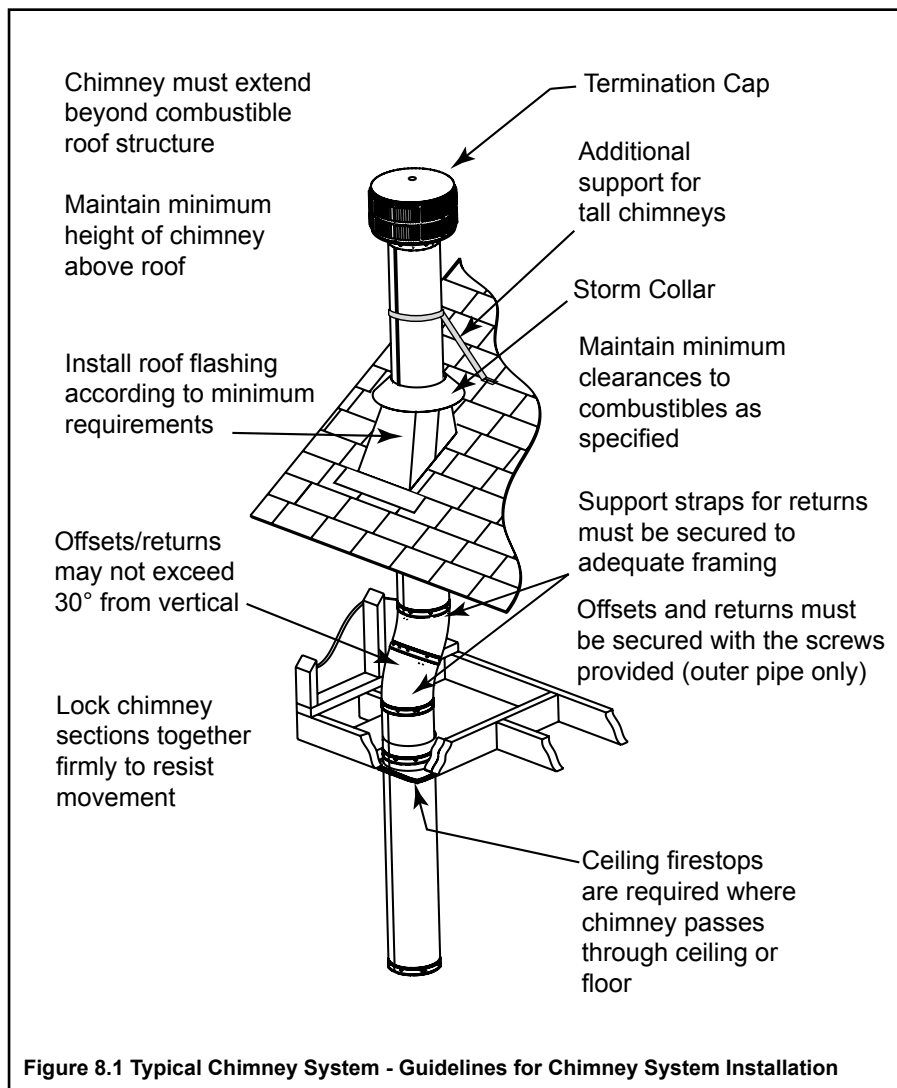
- Keep duct runs short and straight to minimize restriction. A small dip is acceptable for a cold air trap.
- The outside air kit must be installed on the left hand side of the fireplace.
- Locate the outside air hood in a clear area, preferably into prevailing wind during the heating season. Refer to Figure 5.2.
- Install as shown in Figures 7.16, 7.17 and 7.18.
- The air duct may be run vertically.
- The outside air hood must be at least 3 ft (.91 m) below the top of the uppermost chimney section.



8 Chimney Assembly

NOTICE: Chimney performance may vary.

- Trees, buildings, roof lines and wind conditions affect performance.
- Chimney height may need adjustment if smoking or overdraft occurs.



A. Chimney Requirements

Measure vertical distances from the base of the fireplace as shown in Figure 8.2.

	ft	m
• Minimum overall straight height	18	5.49
• Minimum height with offset/return	18.5	5.64
• Maximum height	90	27.43
• Maximum chimney length between an offset and return	20	6.10
• Maximum distance between chimney stabilizers`	35	10.67
• Double offset/return minimum height	24	7.32
• Maximum unsupported chimney length between the offset and return	6	1.83
• Maximum unsupported chimney height above the fireplace	35	10.67
• Maximum unsupported chimney above roof	6	1.83

WARNING! Risk of Fire! You must maintain 2 in. (51 mm) air space clearance to insulation and other combustible materials around the chimney system. Failure to do so may cause overheating and fire.

Determine the chimney components needed to complete your particular installation:

- Measure the total vertical height of the fireplace installation from the base of the fireplace assembly to the approximate location of the bottom of the termination cap.
- Subtract the effective height of the fireplace assembly (see Figure 8.2) from the total vertical height to determine the overall height of the chimney installation.
- Create a schematic for your application similar to Figure 8.2 showing components required (referring to Table 8.1). Figure 8.1 identifies those components and where used.
- Install a ceiling firestop whenever the chimney penetrates a floor/ceiling.

NOTICE: A maximum of two pairs of offsets and returns may be used.

CAUTION! Risk of Fire and/or Asphyxiation! DO NOT connect this fireplace to a chimney flue servicing another appliance. **DO NOT** connect to any air distribution duct or system. These actions could cause overheating/fire in the chimney flue, or release of exhaust fumes into the living areas.

→ Table 8.1

HEIGHT OF CHIMNEY COMPONENTS		in.	mm
US	Canada ONLY		
Chimney Stabilizer			
SL11	SL4	4-3/4	121
Ceiling Firestops			
FS538	FS538	0	0
FS540	FS540	0	0
Offsets/Returns			
SL1130	SL430	14-1/2	368
Roof Flashing			
RF570	RF570	0	0
RF571	RF571	0	0
Chimney Sections*			
SL1106	SL406	4-3/4	121
SL1112	SL412	10-3/4	273
SL1118	SL418	16-3/4	425
SL1136	SL436	34-3/4	883
SL1148	SL448	46-3/4	1187
n/a	SLA10	16-3/4	425

* Dimensions reflect effective height.

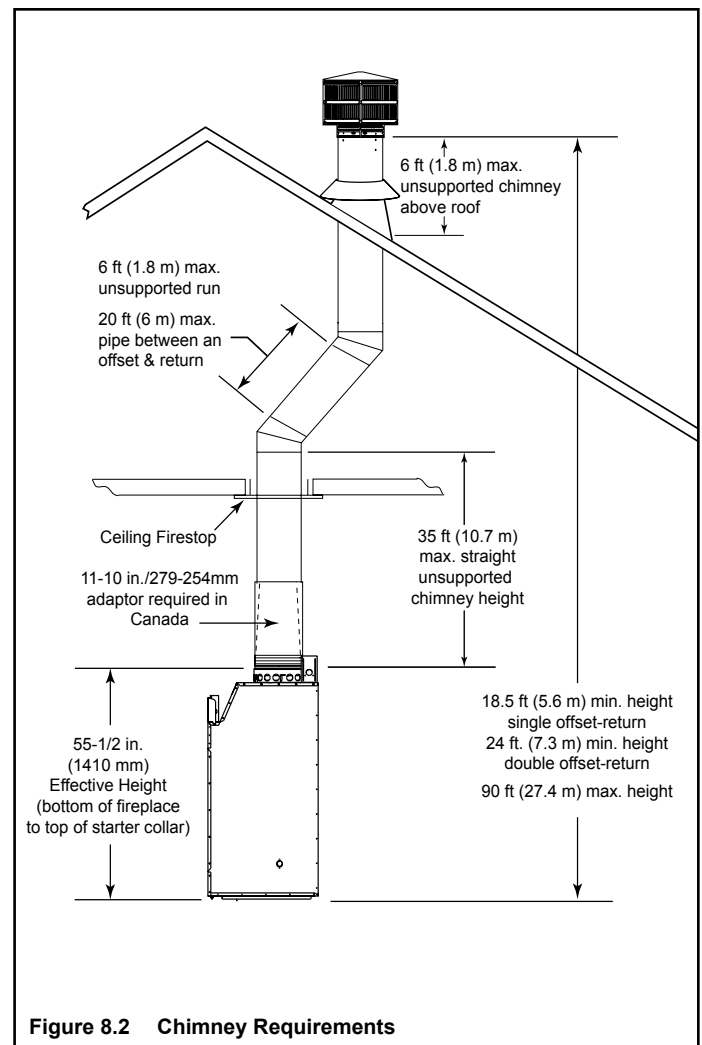


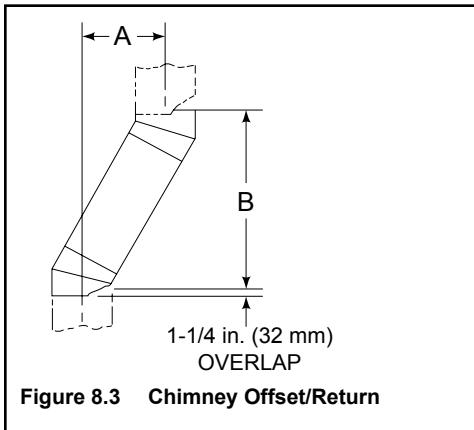
Figure 8.2 Chimney Requirements

B. Using Offsets/Returns

- Use an offset/return to bypass overhead obstructions.
- An offset and return can be used as a single entity or separated by chimney section(s).

WARNING! Risk of Fire! DO NOT use offset/returns greater than 30°. Chimney draft will be restricted and could cause overheating and fire.

- Measure the shift needed to avoid the overhead obstruction. Refer to dimension A in Figure 8.3.
- Find the appropriate A dimension listed in Table 8.2.
- The B dimension coinciding with the A dimension measurement in Table 8.2 represents the required vertical clearance needed to complete the offset/return.
- Read across the chart to find the number of chimney sections/model numbers needed between the offset and return.



Example:

Your “A” dimension from Figure 8.3 is 14 1/2 in. (368 mm). Using Table 8.2 the dimension closest to, but not less than 14 1/2 in. (368 mm) is 15 3/4 in. (400 mm) using a 30° offset/return.

You determined from the table that you would need 36 5/8 in. (930 mm) (Dimension “B”) between the offset and return.

The chimney component that best fits your application is two SL112s.

→ **Table 8.2**

A		B		SL1106 SL406	SL1112 SL412	SL1118 SL418	SL1136 SL436	SL1148 SL448
in.	mm	in.	mm					
4 7/8	124	17 7/8	454	-	-	-	-	-
7 1/4	184	22	559	1	-	-	-	-
9 3/4	248	26 1/8	664	2	-	-	-	-
10 1/4	260	27 1/4	692	-	1	-	-	-
12 3/4	324	31 3/8	797	1	1	-	-	-
13 1/4	337	32 3/8	822	-	-	1	-	-
15 3/4	400	36 5/8	930	-	2	-	-	-
18 1/8	460	40 3/4	1035	1	2	-	-	-
18 3/4	476	41 3/4	1060	-	1	1	-	-
21 3/4	552	4 7	1194	-	-	2	-	-
22 1/4	565	48	1219	-	-	-	1	-
24 3/4	629	52 1/8	1324	1	-	-	1	-
27 3/4	705	57 3/8	1457	-	1	-	1	-
28 1/4	718	58 3/8	1483	-	-	-	-	1
30 3/4	781	62 1/2	1588	1	-	-	-	1
33 3/4	857	67 3/4	1721	-	1	-	-	1
36 3/4	933	7 3	1854	-	-	1	-	1
39 3/4	1010	78 1/8	1984	-	-	-	2	-
41 1/8	1045	82 3/8	2092	1	-	-	2	-
45 3/4	1162	88 1/2	2248	-	-	-	1	1
48 1/8	1222	92 3/4	2356	1	-	-	1	1
51 3/4	1314	98 7/8	2511	-	-	-	-	2

Proper assembly of air cooled chimney parts results in an overlap of chimney joints of 1-1/4 in. (32 mm). Effective length is built into this table.

C. Assemble Chimney Sections

WARNING! Risk of Fire! DO NOT install substitute or damaged chimney components.

- Use only those components described in this manual. Substitute or damaged chimney components could impair safe operation and cause overheating and fire.

- Support the pipe during construction and check to be sure inadvertent loading has not dislodged the chimney section from the fireplace or at any chimney joint.
- Attach a straight chimney section or an offset to the top of the fireplace.
- Place inner flue to the inside of the chimney section below it. Place the outer casing outside the outer casing of the chimney section below it. Refer to Figure 8.4.

NOTICE: Chimney sections cannot be disassembled once locked together. Plan ahead!

- Lock chimney sections and/or offsets/returns together by pushing downward until the top section meets the stop bead on the lower section.
- Pull on the top section to make sure it is fully engaged and will not separate.
- You may use #6 or #8 sheet metal screws no longer than 1/2 in. (13 mm) to fasten chimney sections together. Do NOT penetrate inner flue.

WARNING! Risk of Fire! You MUST use screws (provided) to fasten offset/returns to chimney sections to keep the chimney parts from twisting. Failure to do so could cause fire.

- Fasten offset/returns to chimney sections. Insert the screws (provided) through the predrilled holes. Do NOT penetrate inner flue.
- Secure chimney returns with hanger straps provided; fasten to studs or joists.
- Vertical straight runs of chimney must be supported every 35 ft (10.7 m).

D. Install Chimney Air Kit

- Required in Canada.
- Follow instructions provided with this accessory.

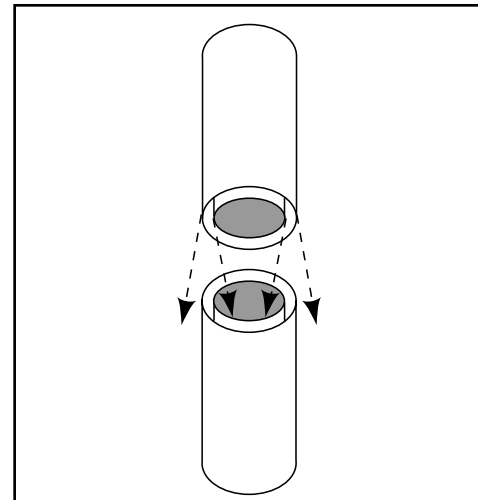


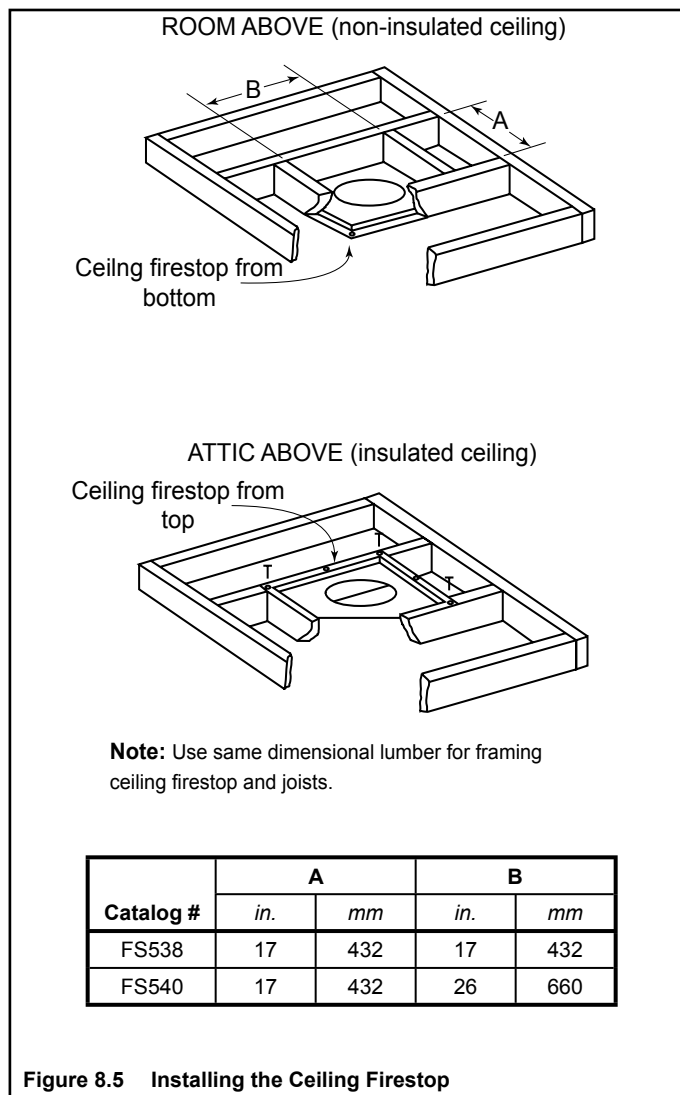
Figure 8.4 Assembling Chimney Sections

E. Install Ceiling Firestops

CAUTION! Risk of Fire! Ceiling firestops must be used whenever the chimney penetrates a ceiling/floor.

- Chase construction requires ceiling firestops at each floor or every 10 ft (3.05 m) of clear space.
- The ceiling firestop slows spread of fire and reduces cold air infiltration.
- Install a ceiling firestop whenever chimney penetrates ceiling/floor.
- Mark and cut an opening in ceiling as shown in Figure 8.5.
- Frame the opening with the same size lumber used in the ceiling joists.
- Nail the ceiling firestop to the bottom of the ceiling joists when there is a room above.
- Use an attic insulation shield if the ceiling is insulated. The ceiling firestop may then be attached above or below the joists.

WARNING! Risk of Fire! DO NOT seal area between firestop opening and chimney pipe except where they enter the attic or leave the warm air envelope of the home (use 600° F sealant).



F. Install Attic Insulation Shield

WARNING! Risk of Fire! You **MUST** install an attic insulation shield when there is any possibility of insulation or other combustible material coming into contact with the chimney.

- **DO NOT** pack insulation between the chimney and the attic insulation shield.
- Failure to keep insulation and other materials away from chimney pipe could cause fire.
- **DO NOT** offset chimney inside insulation shield.

Installation of a ceiling firestop is required

- Refer to Figures 8.6 - 8.8.
- Roll the shield (around the chimney if already installed) until you have a 3 in. (76 mm) overlap and the three holes on each side match up (large holes on top).
- Insert three screws into the matching holes to form a tube.
- Bend three tabs on the bottom of the tube inward to 90° to maintain chimney air space (refer to Figure 8.6).
- Rest the insulation shield on the ceiling firestop below.
- Bend the three short tabs at the top of the shield inward to 90° to maintain the 2 in. (51 mm) air space from the chimney.
- Bend the remaining top tabs to just meet the pipe.

If you wish to make a custom shield or barrier, follow these guidelines:

- Metal is preferred, although any material stiff enough to hold back the insulation can be used.

WARNING! Risk of Fire! Use of cardboard or other materials that can deflect under humidity or other environmental conditions is not recommended.

- The shield or barrier must be tall enough to extend above the insulation and prevent blown-in insulation from spilling into the cavity.
- Maintain specified air spaces around chimney.
- Check instructions and local codes for further details.

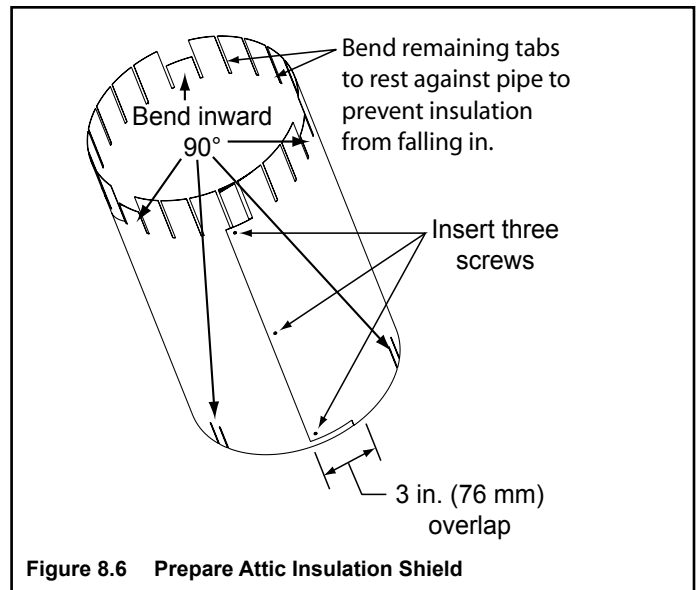


Figure 8.6 Prepare Attic Insulation Shield

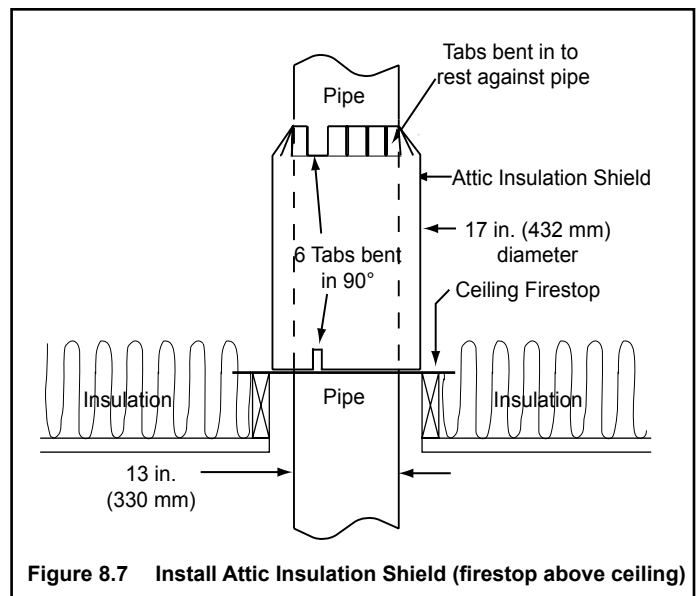


Figure 8.7 Install Attic Insulation Shield (firestop above ceiling)

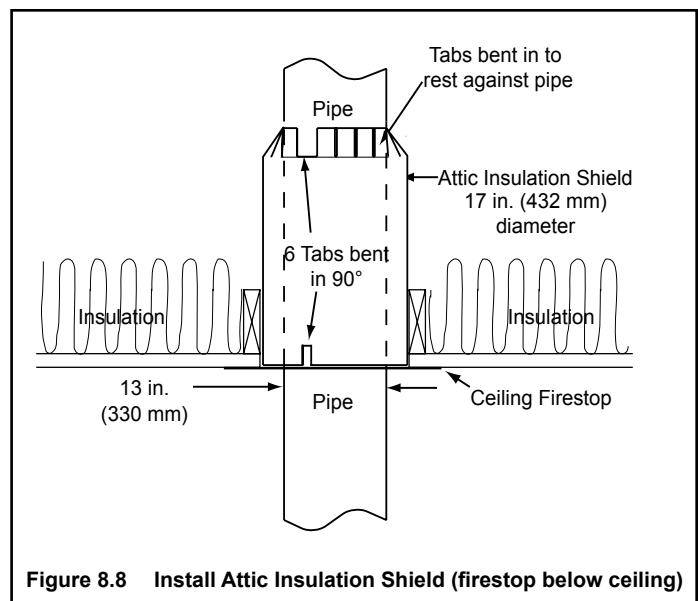


Figure 8.8 Install Attic Insulation Shield (firestop below ceiling)

G. Cut out Hole in Roof

- Refer to Figure 8.9.
- Plumb from roof to center of chimney.
- Drive a nail up through roof to mark center of pipe.
- Measure to either side of nail and mark the 17 in. x 17 in. (432 mm x 432 mm) opening required.
- Measure opening on the horizontal; actual length may be larger depending on roof pitch.
- Cut out and frame opening.
- Refer to **Chapter 25** of the **Uniform Building Code** for roof framing details.

H. Complete Installation

WARNING! Risk of Fire! You **MUST** maintain 2 in. (51 mm) air space to insulation and other combustible materials around the chimney system. Failure to do so could cause overheating and fire.

- Keep chimney sections from separating or twisting.
- You may secure straight chimney sections at the joints with screws no longer than 1/2 in. (13 mm).

The following steps should be skipped if using a chase.

- Install roof flashing appropriate to roof pitch.
- Install round termination cap and storm collar.

I. Install Flashing

- Assemble chimney so it passes through the framed opening.
- Slip the flashing over the chimney.

NOTICE: Roofing shingles must be below the flashing plate on the lower side of a sloped roof and over the flashing plate on the sides and top.

- Nail the flashing to the roof. Keep gaps between the flashing plate and the roof to a minimum.
- Caulk the flashing plate and roof junction as well as the vertical seam on the flashing. All nail heads must be caulked with a roofing sealant.

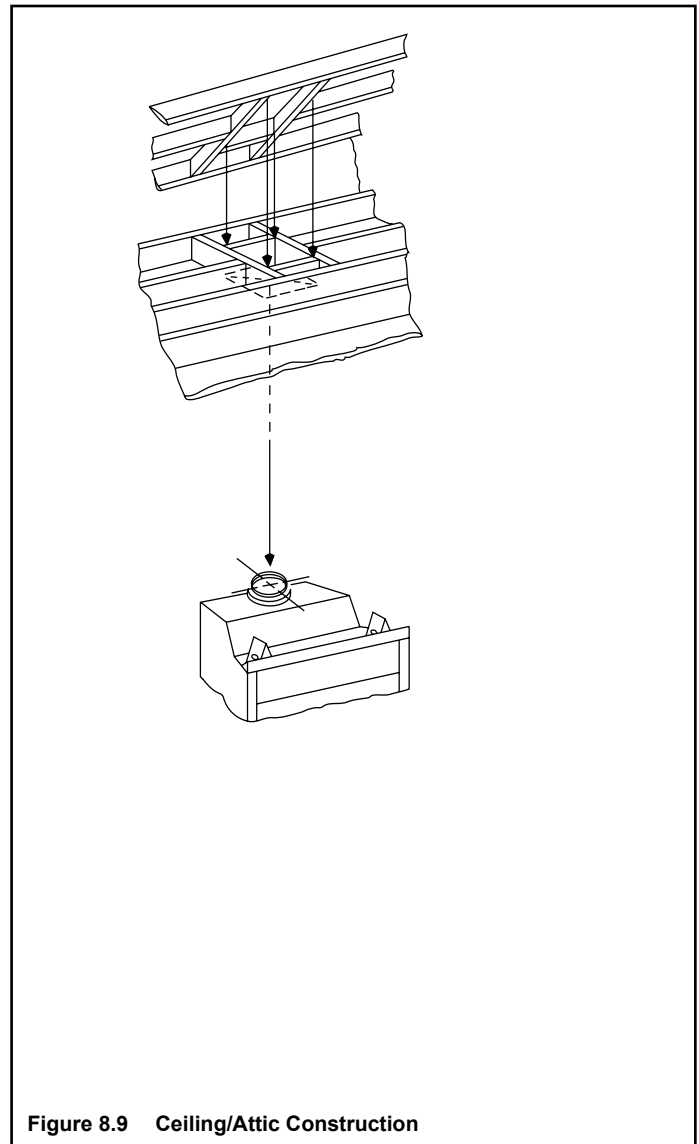
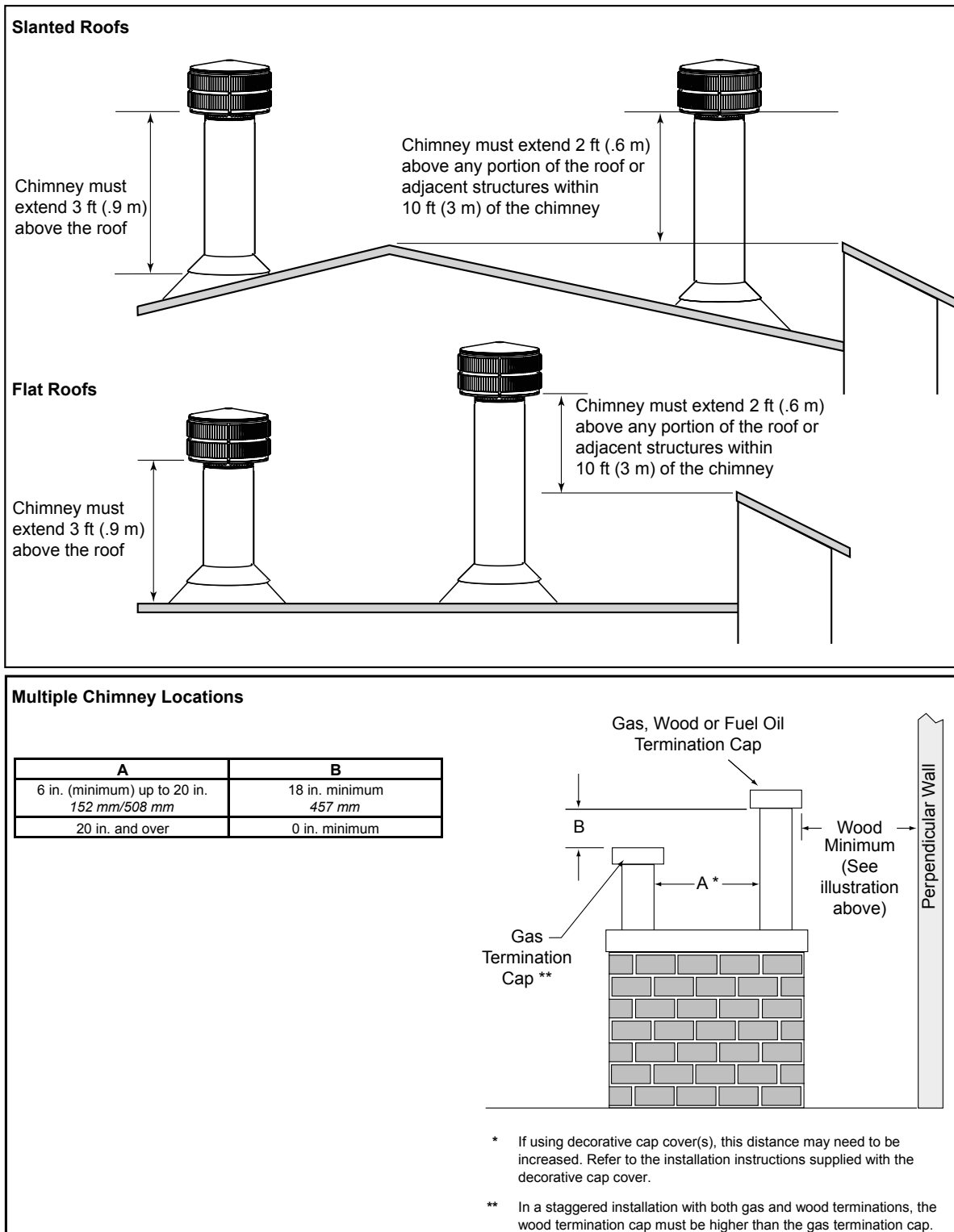


Figure 8.9 Ceiling/Attic Construction

J. Chimney Termination Requirements

- Install a cap approved and listed for this fireplace system.
- Locate cap where it will not become plugged by snow or other materials.
- Locate cap away from trees or other structures.
- The bottom of the termination cap must be at least 3 ft (.91 m) above the roof AND at least 2 ft (.61 m) above any portion of roof within 10 ft (3.05 m) as shown in Figure 8.10.
- The distance required between caps is shown in Figure 8.10.



→ Figure 8.10 Multiple Chimney Locations

9 Chase Installations

A. Construct the Chase

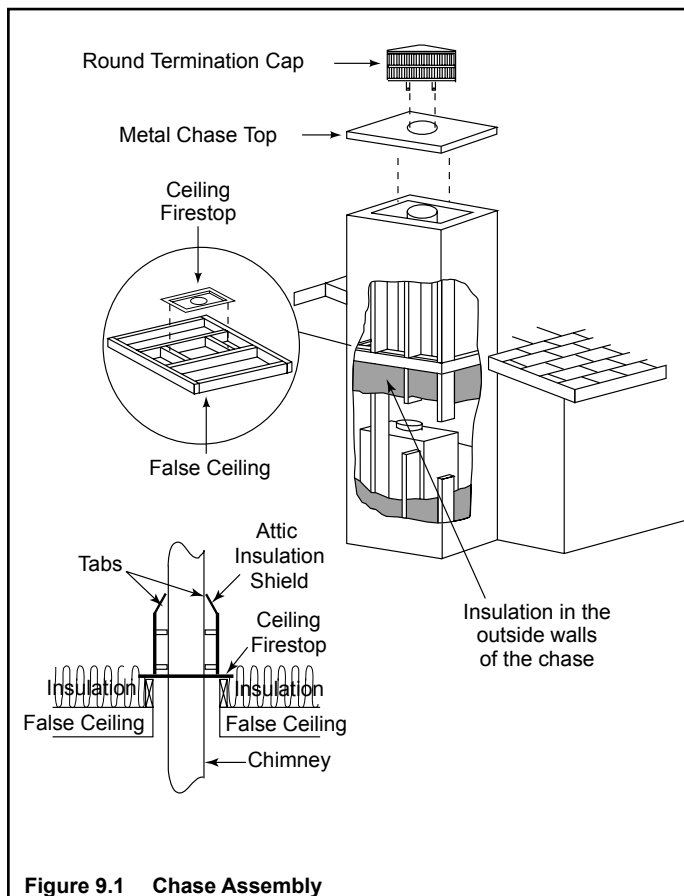
A chase is a vertical boxlike structure built to enclose the fireplace and/or its vent system. Vertical chimneys that run on the outside of a building must be installed inside a chase.

Construction of the chase may vary with the type of building. These instructions are not substitutes for the requirements of local building codes. Local building codes **MUST** be checked.

A chase should be constructed in the manner of all outside walls of the home to prevent cold air drafting problems. The chase should not break the outside building envelope in any manner. All outer walls need to be insulated.

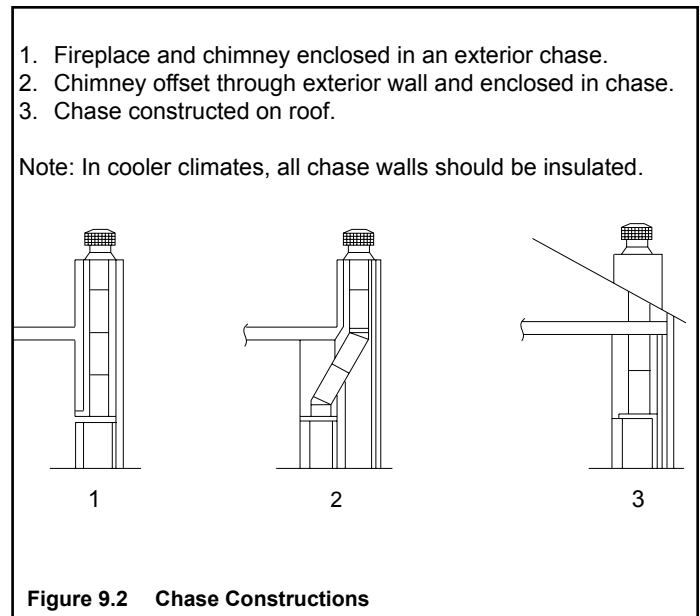
Building codes require false ceiling and ceiling firestops at each floor of the chase or every 10 ft (3.05 m) of clear space to control spread of fire.

Walls, ceiling, base plate and cantilever floor at the first level of the chase should be insulated. See Figure 9.1. Vapor and air infiltration barriers should be installed in the chase as per regional codes for the rest of the home. Additionally, Hearth & Home Technologies recommends that the inside surfaces be sheet rocked and taped (or the use of an equivalent method) for maximum air tightness.



Gas line holes and other openings should be caulked with high temperature caulk or stuffed with unfaced fiberglass insulation. If the fireplace is being installed on a cement slab, we recommend that in cold climates, a sheet of plywood or other raised platform be placed underneath to prevent conducting cold up into the room.

Three examples of chase applications are shown in Figure 9.2.



WARNING! You must install false ceilings and ceiling firestops at each floor of the chase or every 10 ft (3.05 m) to control spread of fire.

WARNING! Risk of Fire! DO NOT seal area between fire stop opening and chimney pipe. Restricting air flow around chimney may cause fire.

WARNING! Risk of Fire! You must maintain a minimum 2 in. (51 mm) air space clearance to insulation and other materials surrounding the chimney system.

- Insulation and other materials must be firmly secured to prevent accidental contact with chimney system.
- The chase must be properly blocked to prevent blown insulation or other combustibles from entering and making contact with fireplace or chimney.
- Failure to prevent contact between insulation or other materials and chimney system may cause overheating and fire.

B. Install Fireplace & Chimney

Install as per Sections 7 and 8.

C. Install Chase Top

- You **MUST** use a chase top in a chase installation. Chase tops are available from your Heatilator dealer or may be field constructed.
- Include a turndown and drip edge to prevent water from seeping into the chase.
- Include a 2 in. (51 mm) soldered, welded or spun collar around pipe opening to keep water out.
- Provide a 1/8 in. (3 mm) gap around the flue pipe.
- Slope the chase top downward away from the opening.

WARNING! Risk of Fire! DO NOT caulk the pipe to the chase top collar.

- Caulk all seams to prevent leaks.
- Refer to Figure 9.3.

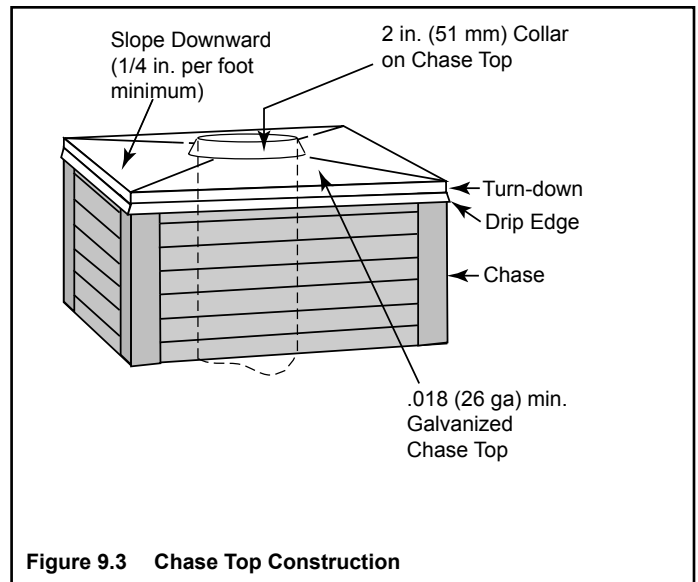


Figure 9.3 Chase Top Construction

→ D. Install Termination Cap

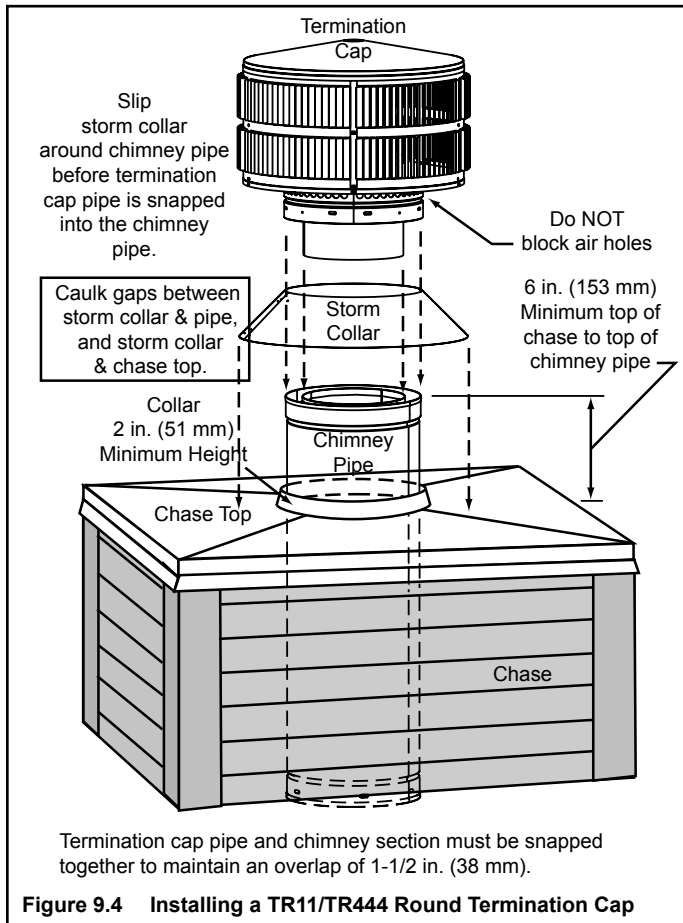
Install the chimney sections up through the chase enclosure.

- Refer to termination cap instructions.

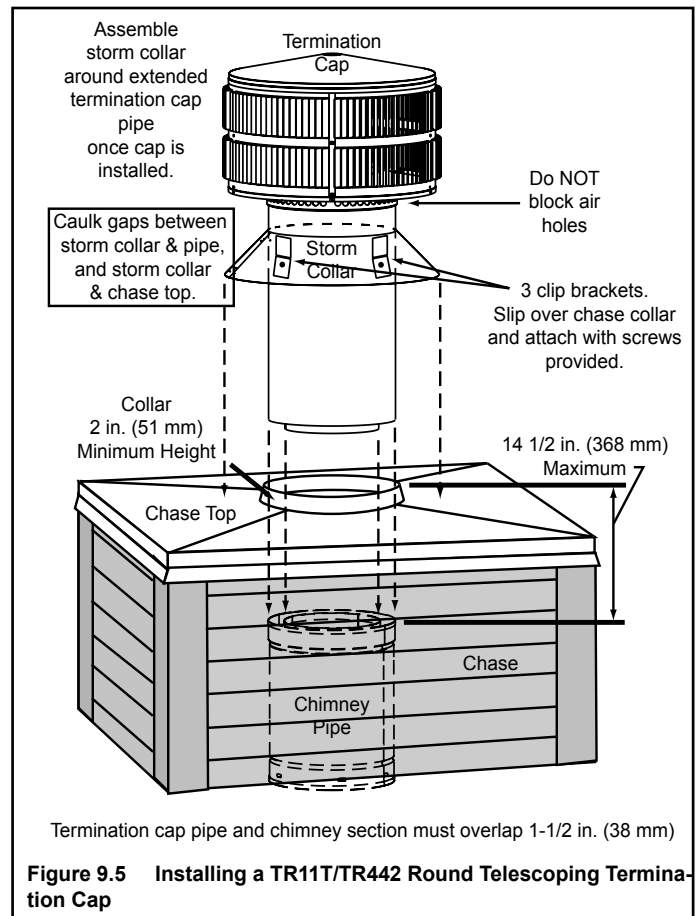
WARNING! Risk of Fire! The minimum overlap of cap to pipe (as shown in the following illustrations) **MUST** be met or chimney may separate from cap. Separation allows sparks, heat and embers to escape.

NOTICE: Paint the termination cap with a rust-resistant paint to protect against the effects of corrosion on those parts exposed to the weather.

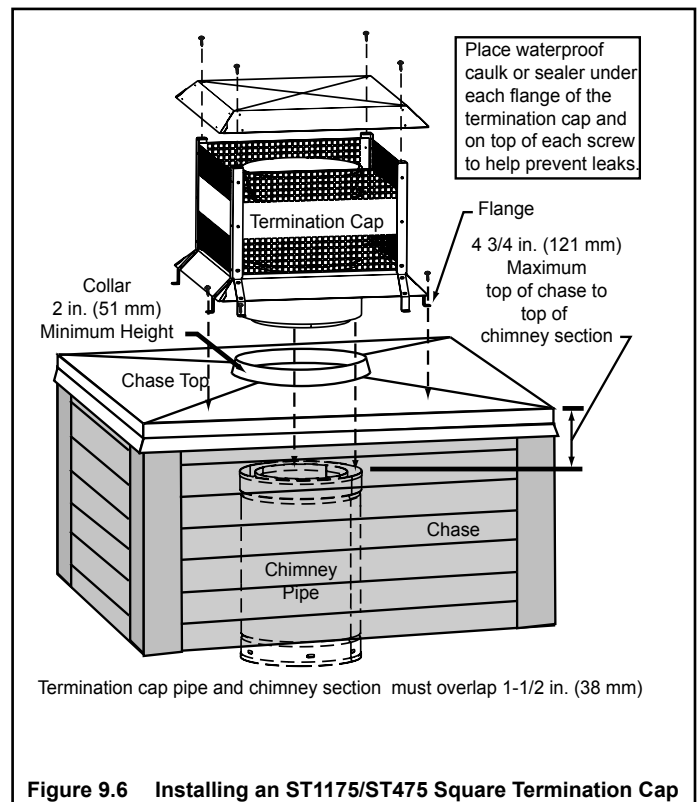
- TR11/TR444 Round Termination Cap



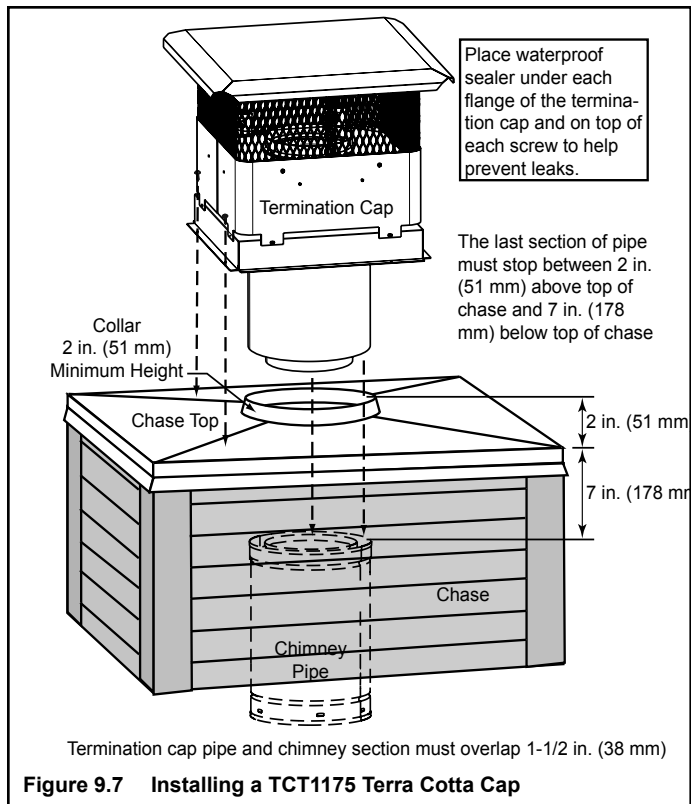
- TR11T/TR442 Round Telescoping Termination Cap



- ST1175/ST475 Square Termination Cap



- TCT1175 Terra Cotta Cap



10 Shrouds

A. Radiation Shield

- Some shrouds require a radiation shield. Use where specified.
- Radiation shield must be constructed of minimum 26 ga sheet metal.

B. Field Constructed Shrouds

WARNING! Risk of Fire! Shrouds must be constructed as specified. Improper construction may overheat chase top.

- Chase top shrouds may be field constructed where permitted by regional building codes.

NOTICE: Some regional codes require an agency-Listed shroud. Consult your local building officials.

- Hearth & Home Technologies Inc. supplies UL listed shrouds. See your dealer for details.
- The following field constructed shroud designs have been tested for Hearth Technologies fireplace systems and termination caps.
- The shrouds must be constructed from a minimum .018 in. (26 ga) thick aluminized steel.

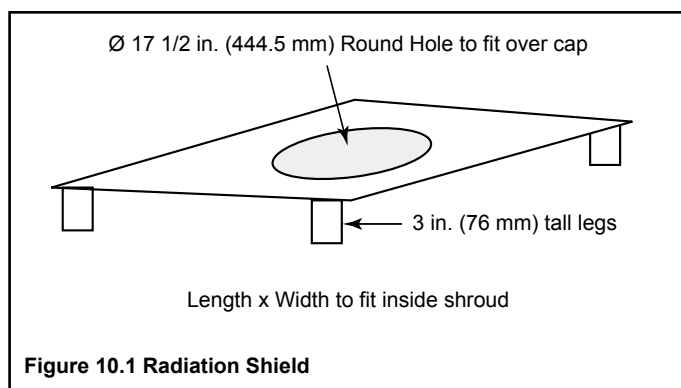


Figure 10.1 Radiation Shield

- The wire mesh is optional but recommended and must be .018 in. thick minimum, 1/2 in. mesh.

Open Top Shroud (TR11/TR11T caps require radiation shield)

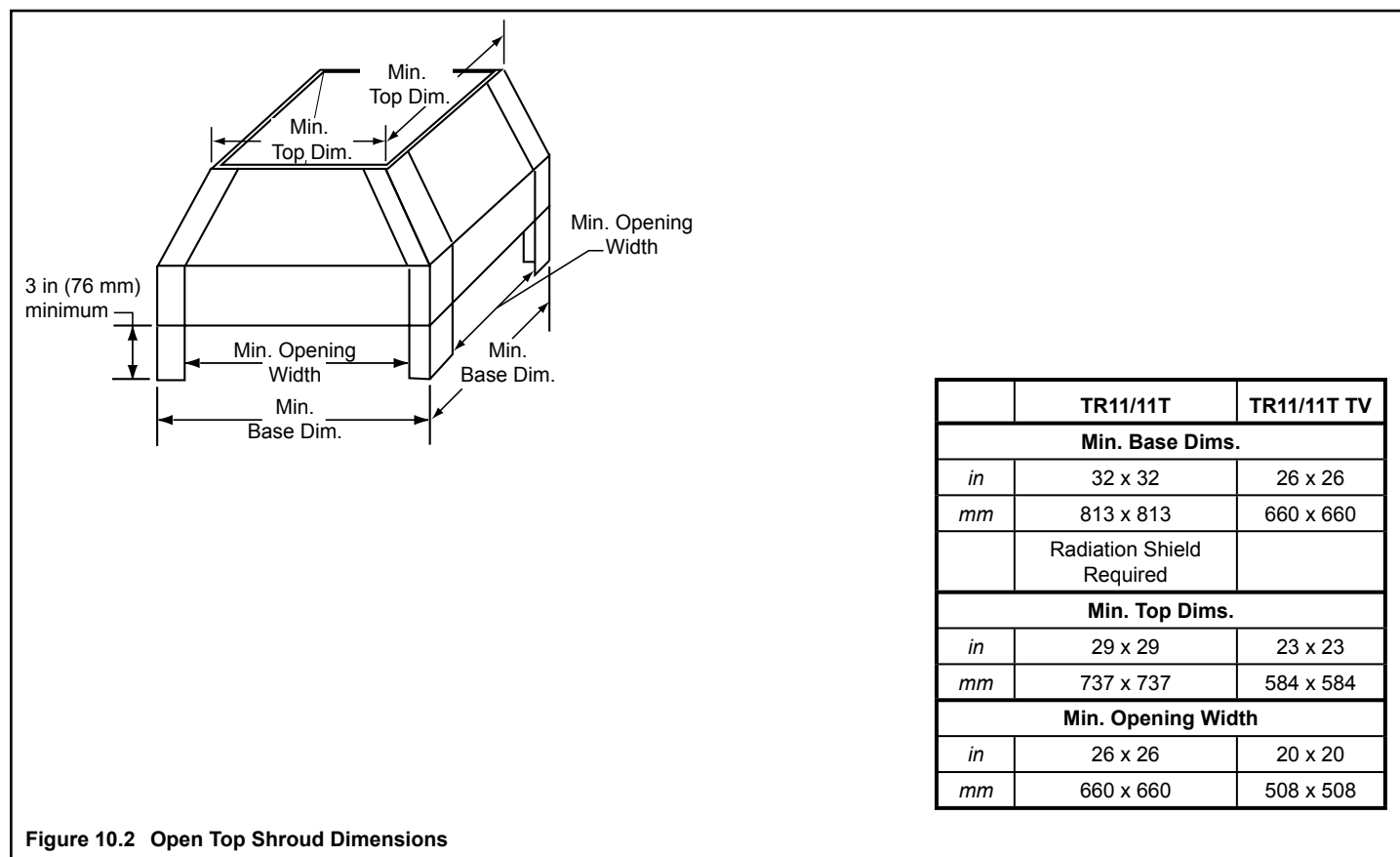
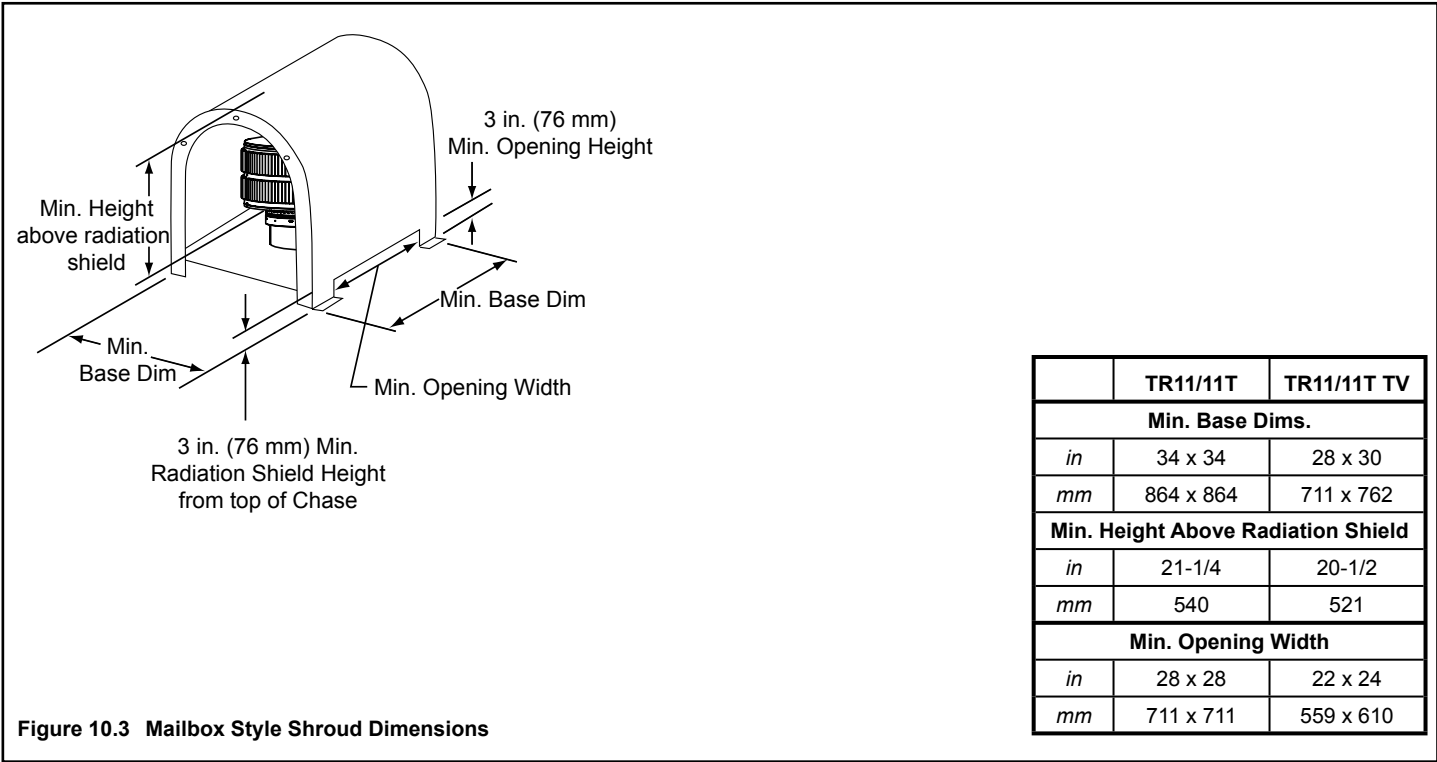
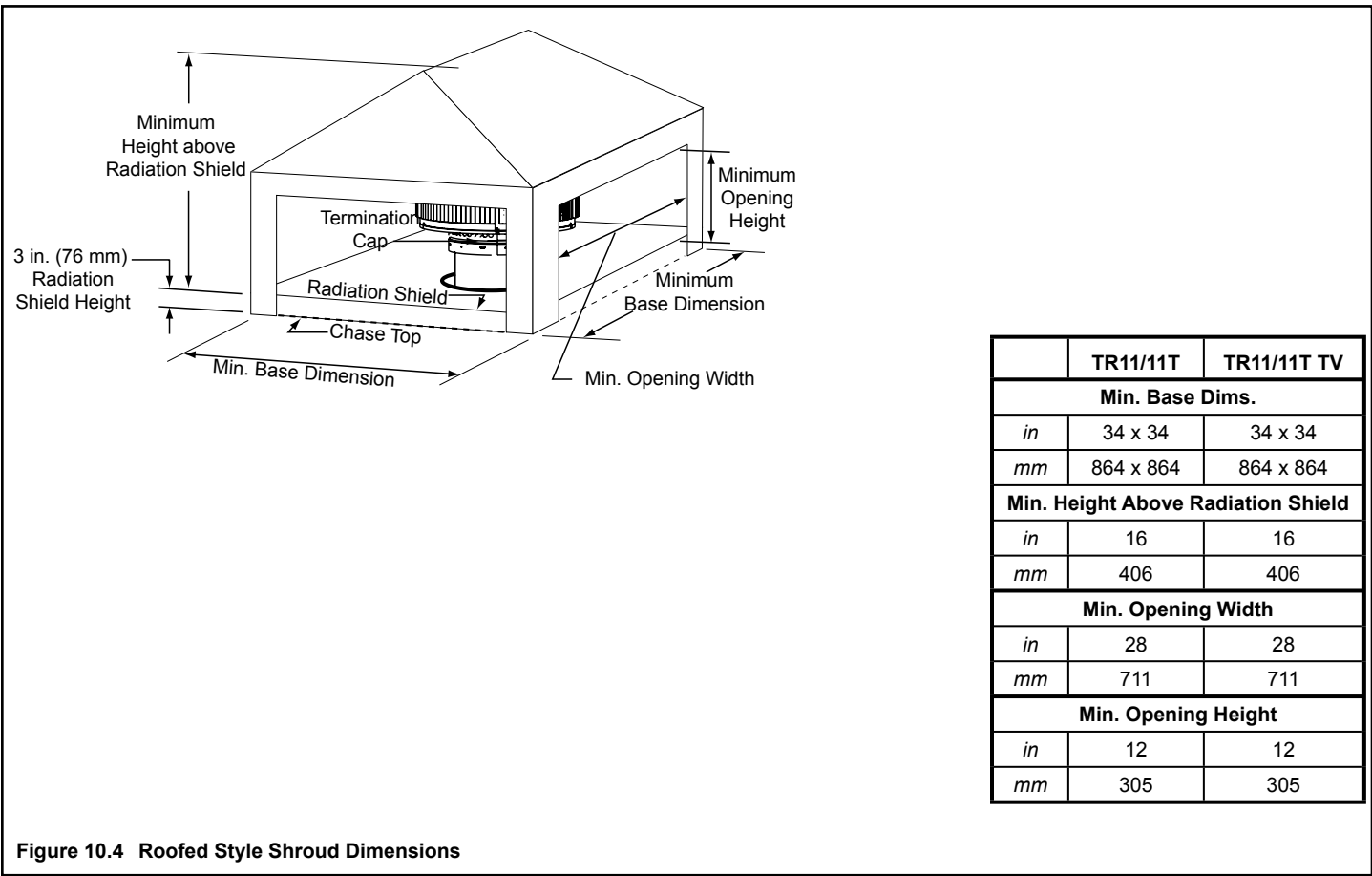


Figure 10.2 Open Top Shroud Dimensions

Mailbox Style Shroud (radiation shield required)



Roofed Style Shroud (radiation shield required)



11 Finishing

A. Non-Combustible Materials

- Materials which will not ignite and burn, composed of any combination of the following:
 - Steel - Iron
 - Brick - Tile
 - Concrete - Slate
 - Glass - Plasters
- Materials reported as passing **ASTM E 136, Standard Test Method for Behavior of Metals, in a Vertical Tube Furnace at 750° C**

B. Combustible Materials

- Materials made of or surfaced with any of the following materials:
 - Wood - Compressed paper
 - Plant fibers - Plastic
- Any material that can ignite and burn; flame proofed or not, plastered or un-plastered

C. Hearth Extension

WARNING! Risk of fire! High temperatures, sparks, embers or other burning material falling from the fireplace may ignite flooring or concealed combustible surfaces.

- Protective metal hearth strips **MUST** be installed.
- Hearth extensions **MUST** be installed exactly as specified.

- You **MUST** use a hearth extension with this fireplace.
- This fireplace has been tested and approved for use with a hearth extension insulated to a minimum R value of 1.03.
- The hearth extension material **MUST** be covered with tile, stone or other non-combustible material.
- Manufactured hearth materials will usually have a published **R value** (resistance to heat) or **k value** (conductivity of heat). Refer to the formula in Table 11.1 to convert a k value to an R value,
- Refer to Table 11.2 for hearth extension insulation alternatives.

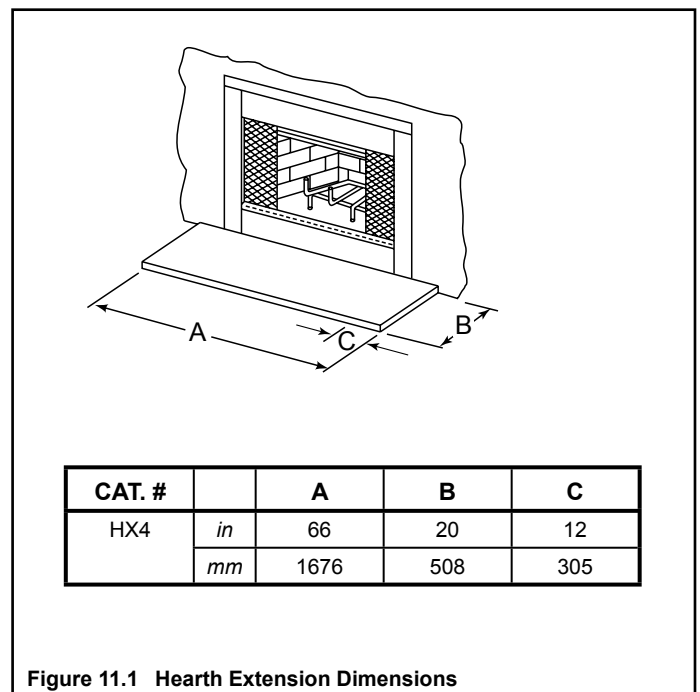


Table 11.1

$$R = 1/k \times \text{inches of thickness}$$

Table 11.2

Hearth Extension Insulation Alternatives-Total minimum R Value must equal 1.03			
Material	k per inch thick	r per inch thick	Minimum thickness required
Hearth & Home HX3, HX4 (Micore 300™)	0.49	2.06	1/2 in.
USG Micore 160™	0.39	2.54	1/2 in.
USG Durock™ Cement Board	1.92	0.52	2 in.
Cement Mortar	5.0	0.20	5-1/8 in.
Common Brick	5.0	0.20	5-1/8 in.
Ceramic Tile	12.50	0.08	12-1/4 in.
Armstrong™ Privacy Guard Plus	0.46	2.18	1/2 in.
Marble	14.3-20.0	0.07-0.05	14-5/8 in. - 20-3/8 in.

Raised Hearth Extension Framing

The hearth framing must be constructed of non-combustible materials (Figure 11.2) and placed on an HX4, or equivalent material (Figure 11.4). When creating the platform, allow for the thickness of the non-combustible finishing materials (Figure 11.5).

IMPORTANT! Hearth extension design must be determined before installation of fireplace.

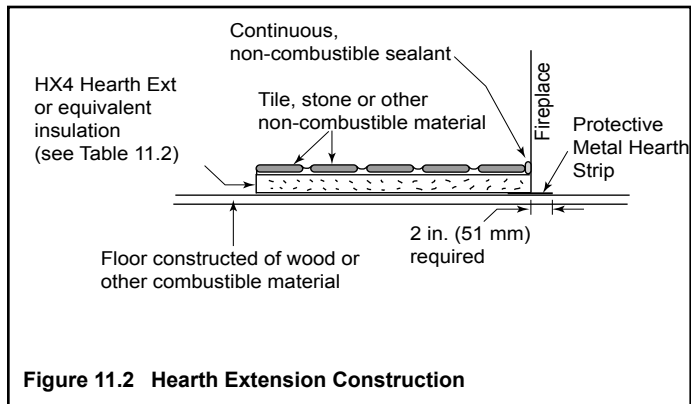


Figure 11.2 Hearth Extension Construction

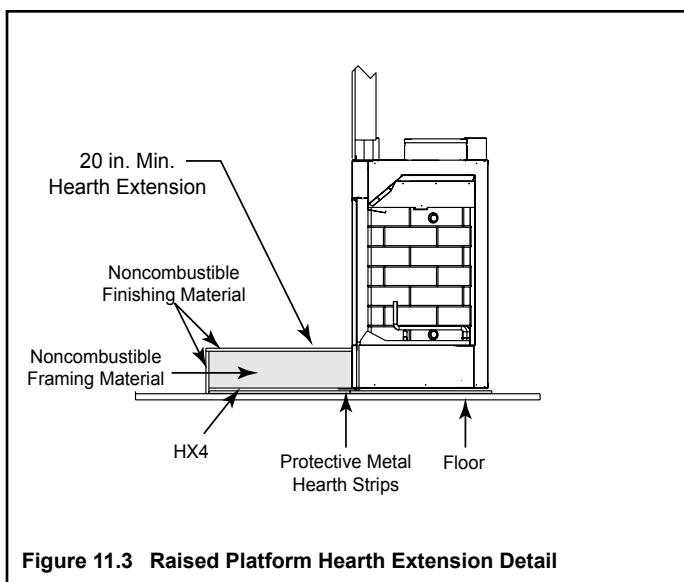


Figure 11.3 Raised Platform Hearth Extension Detail

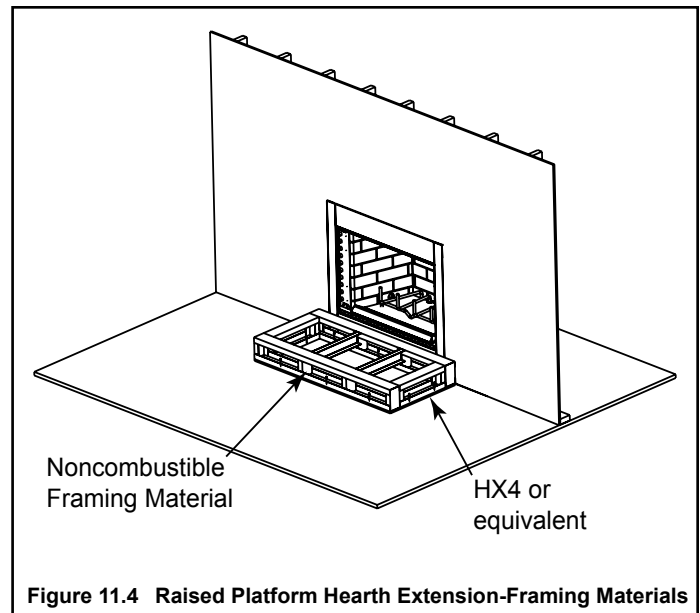


Figure 11.4 Raised Platform Hearth Extension-Framing Materials

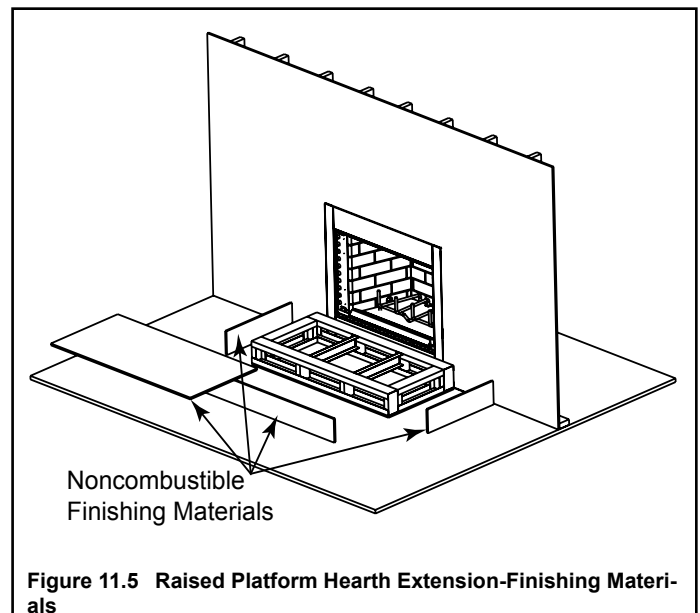
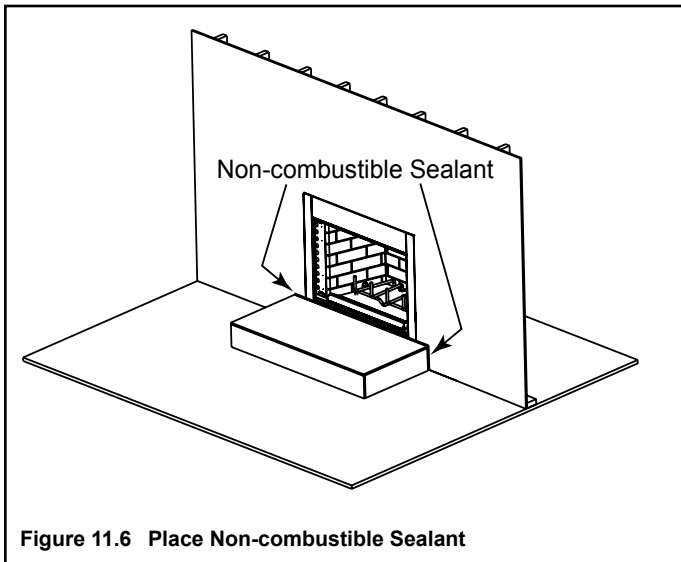


Figure 11.5 Raised Platform Hearth Extension-Finishing Materials

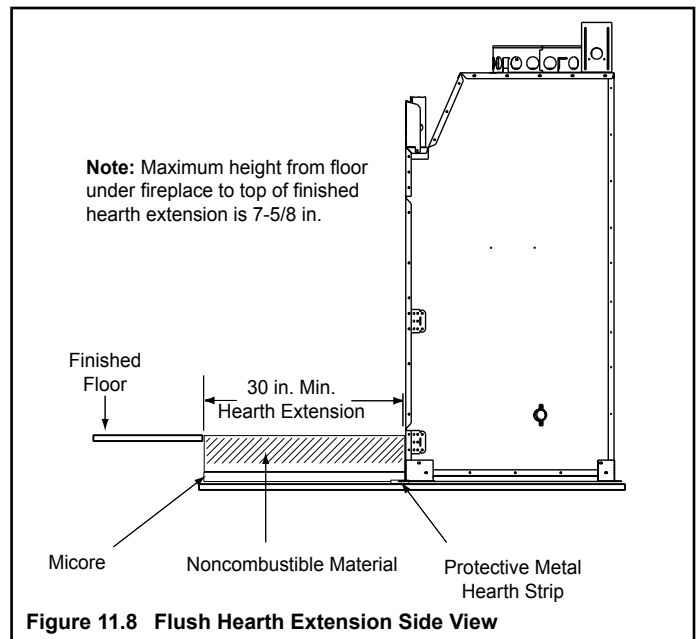
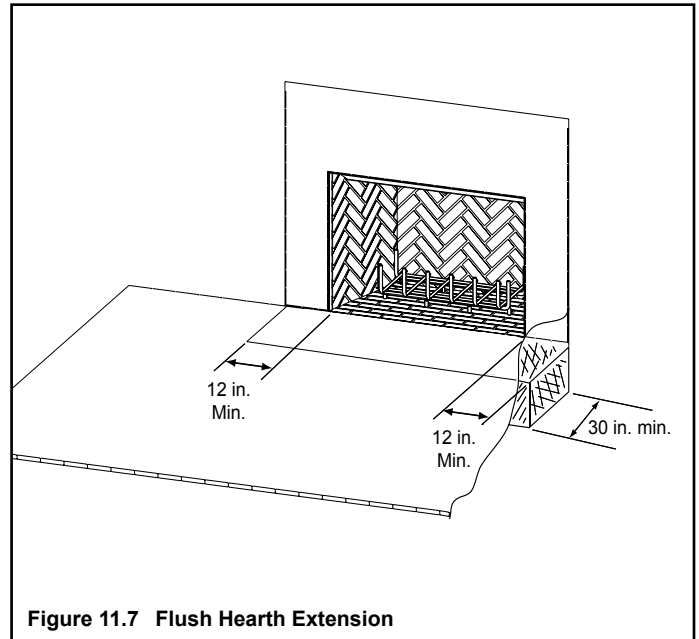
Non-combustible Sealant

After completing the framing and applying the facing materials over the framing, a bead of non-combustible sealant must be used to close off any gaps at the top and sides between the fireplace hearth.



Flush Hearth Extension Framing

A raised hearth extension built flush with the fireplace opening (Figures 11.7, 11.8) requires the fireplace to be installed on a non-combustible surface.

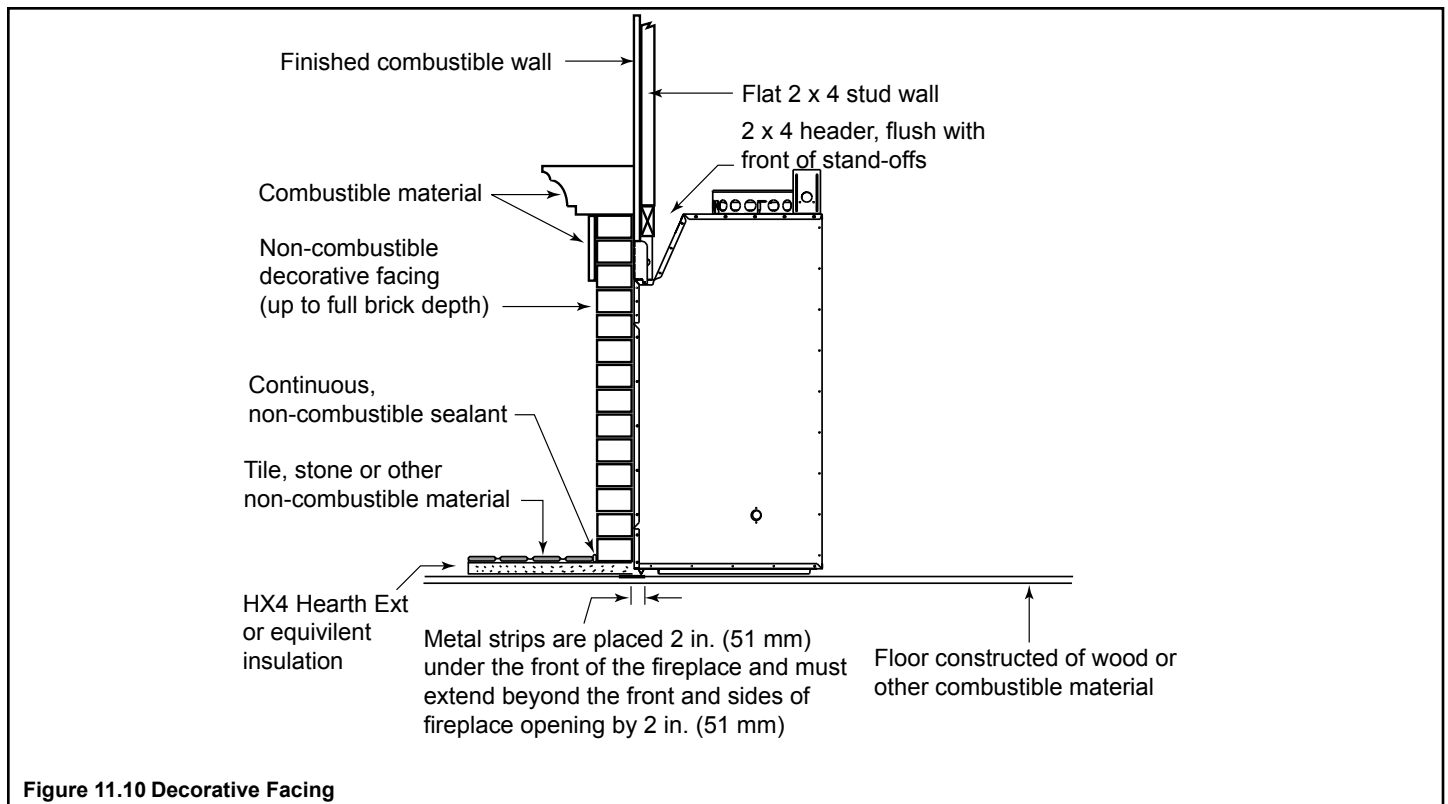
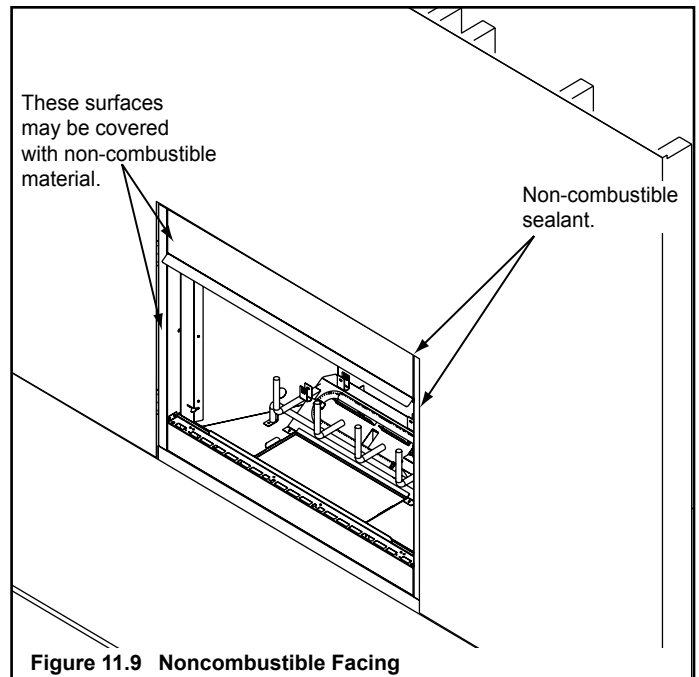


D. Finishing Material

Refer to Sections 11.A. and Sections 11.B. for combustible/noncombustible materials. Refer to Figure 11.9 for noncombustible zone.

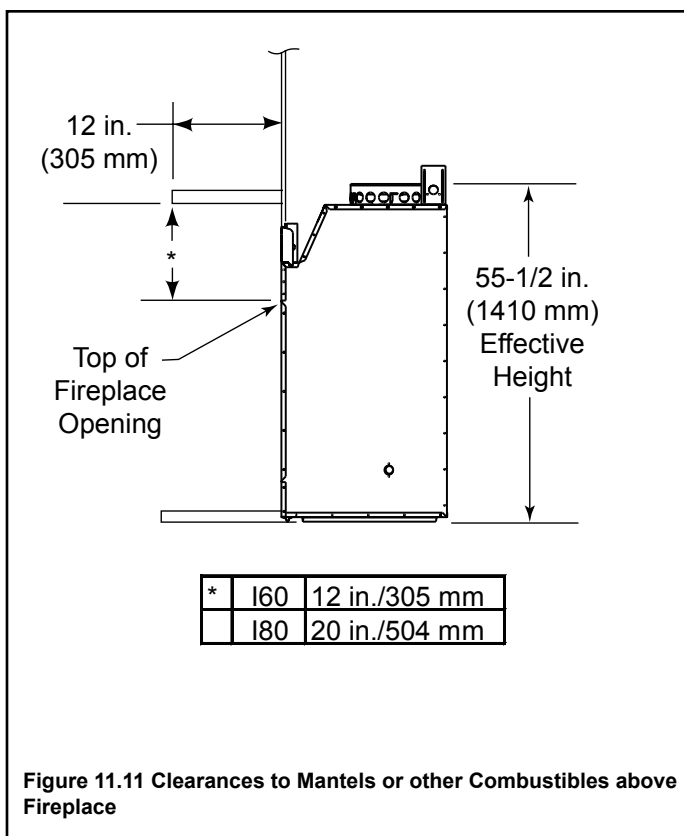
WARNING! Risk of Fire! You must maintain clearances.

- Use only non-combustible framing material below standoffs.
- Sheetrock, wood or other combustibles must NOT be used as sheathing or facing in the noncombustible zone.
- **DO NOT** cover metal fireplace front with combustible materials.
- Install combustible materials only to specified clearances on top front and side edges.



E. Combustible Mantel

- See Figure 11.11.
- A combustible mantel may be positioned no lower than 12 in./305 mm (I60) or 20 in./508 mm (I80) above the top of the fireplace opening.
- A combustible mantel may have a maximum depth of 12 in./305 mm.
- Combustible trim and materials cannot be placed within 6 in. (152 mm) of the fireplace opening (top or sides).
- Combustible materials projecting more than 1-1/2 in. (38 mm) shall not be placed within 12 in. (305 mm) from the top of the fireplace opening.
- Combustible trim must not cover the metal surfaces of the fireplace.
- Mantel clearance is in accordance with **Section 7-3.3.3** of **ANSI/NFPA211**.



F. Sidewalls/Surrounds

- Adjacent combustible sidewalls must be located a minimum of 24 in. (610 mm) from the fireplace opening.
- Combustible or non-combustible mantel legs, surrounds and stub walls may be constructed per Figure 11.12.

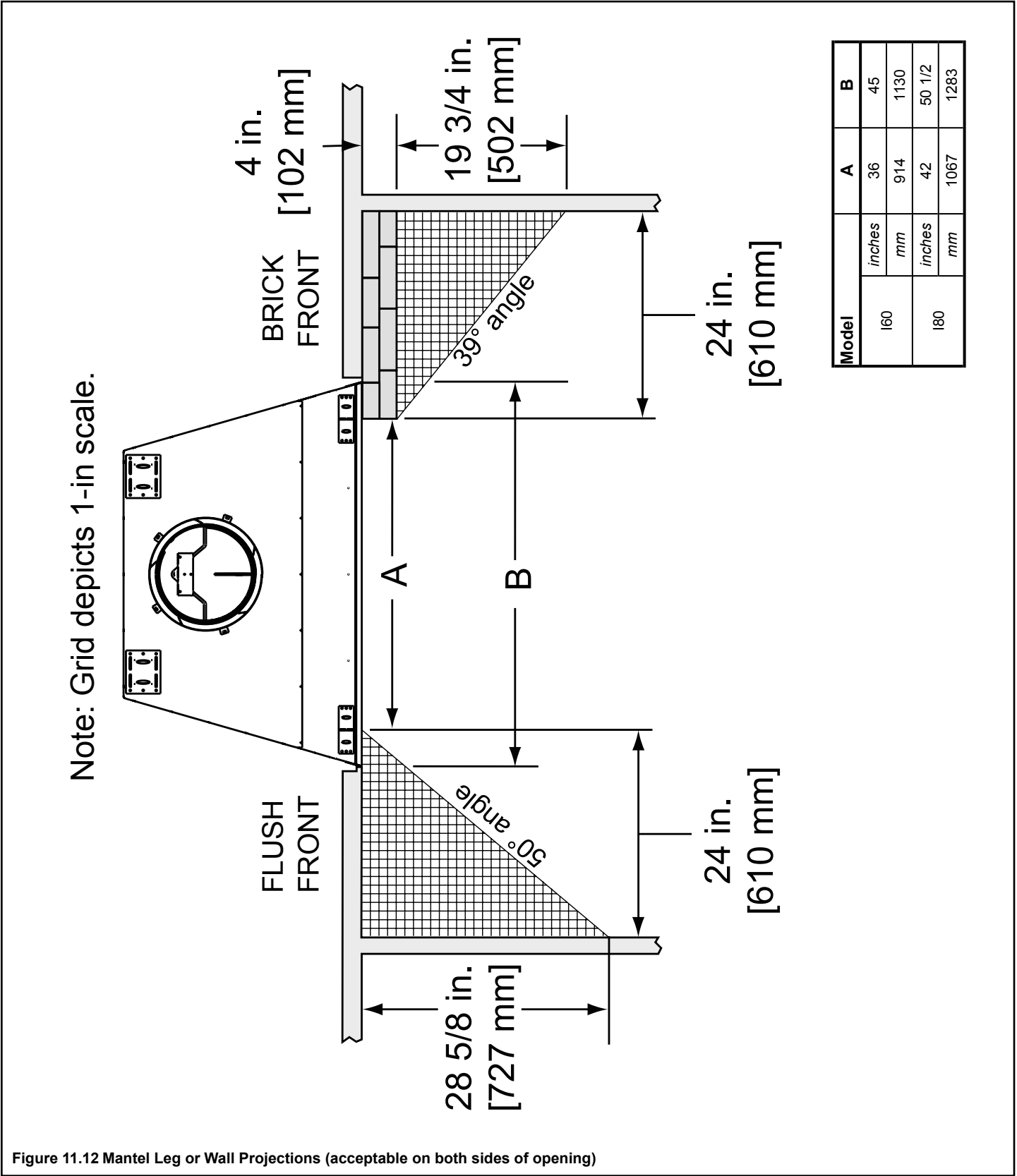


Figure 11.12 Mantel Leg or Wall Projections (acceptable on both sides of opening)

12 Accessories

A. Gas Log/Lighter Provision

WARNING! Fire and/or Asphyxiation Risk! Use with solid wood fuel or decorative gas appliance only. Gas fire generates fumes.

- **DO NOT** install unvented gas logs
- Damper must be locked fully open when gas logs are installed

A certified gas log lighter or decorative gas log set can be installed in this fireplace.

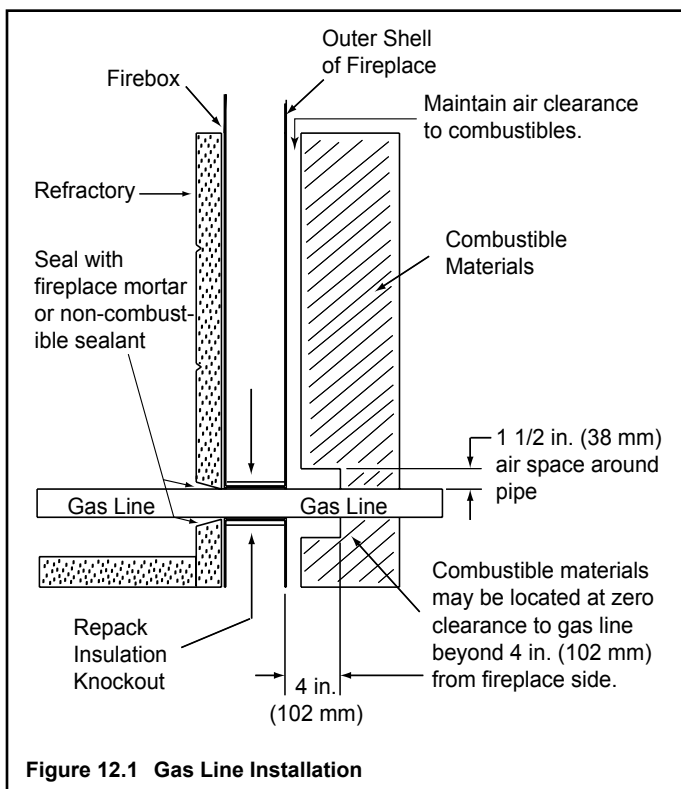
- Maximum input is 100,000 BTU/hr.
- Decorative gas appliance must be certified to **ANSI Z21.60** "Standard for Decorative Gas Appliances for Installation in Vented Fireplaces".
- Must be installed in accordance with the **National Fuel Gas Code, ANSI Z223.1**.
- A gas log set must incorporate a gas shutoff.
- Gas Log set requires the damper to be locked fully open.
- A listed automatic damper system with safety interlock may be used in this fireplace with only compatible, listed gas log sets. See damper system manufacturer's instructions.
- Knockouts are provided on both sides of the fireplace and in refractories for 1/2 in. (13 mm) iron pipe.
- Seal refractory around pipe with fireplace mortar or a non-combustible sealant.

B. Wood Burning Inserts

WARNING! Risk of Fire! Improper installation of wood inserts may cause fireplace or chimney system to overheat.

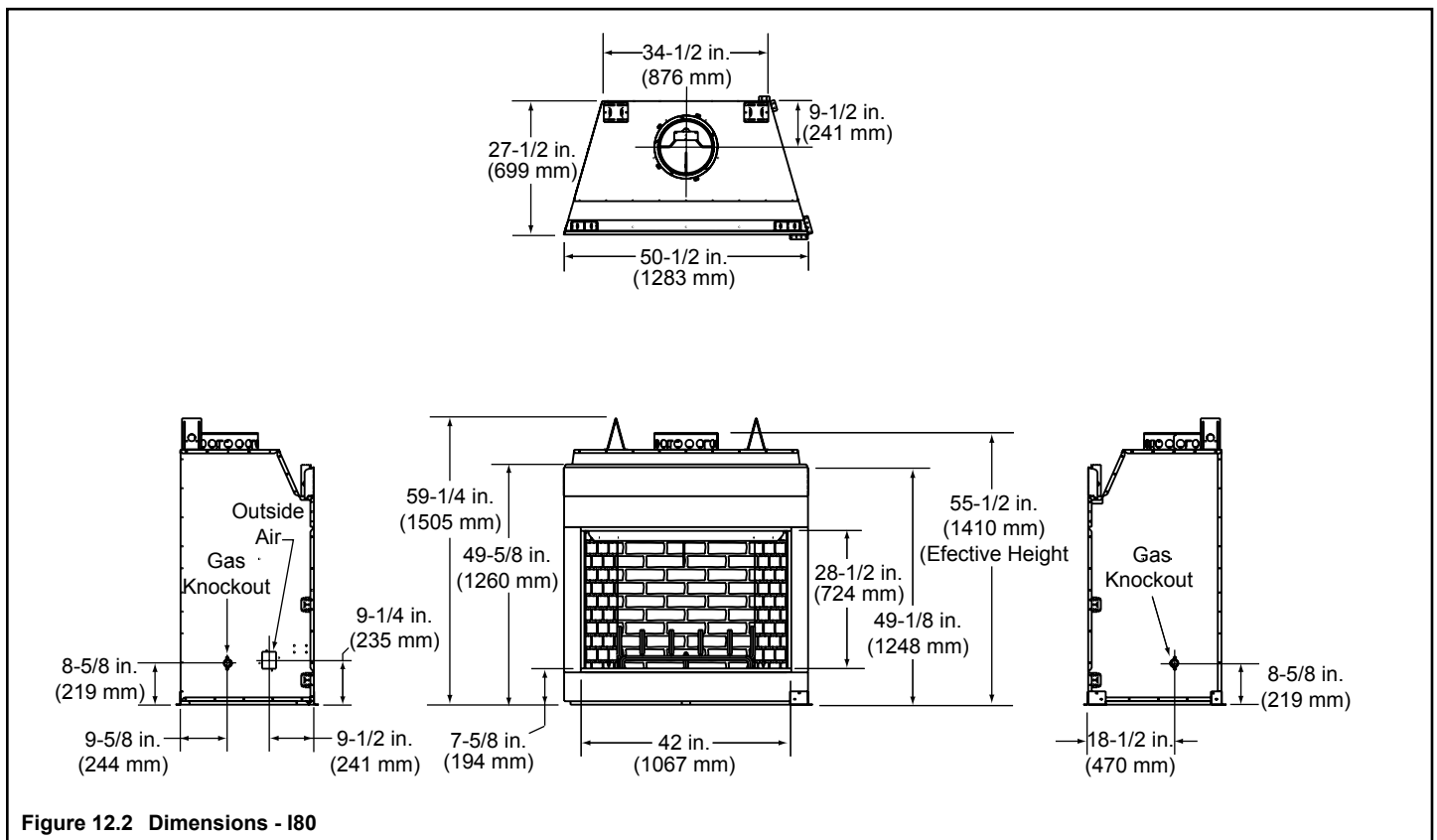
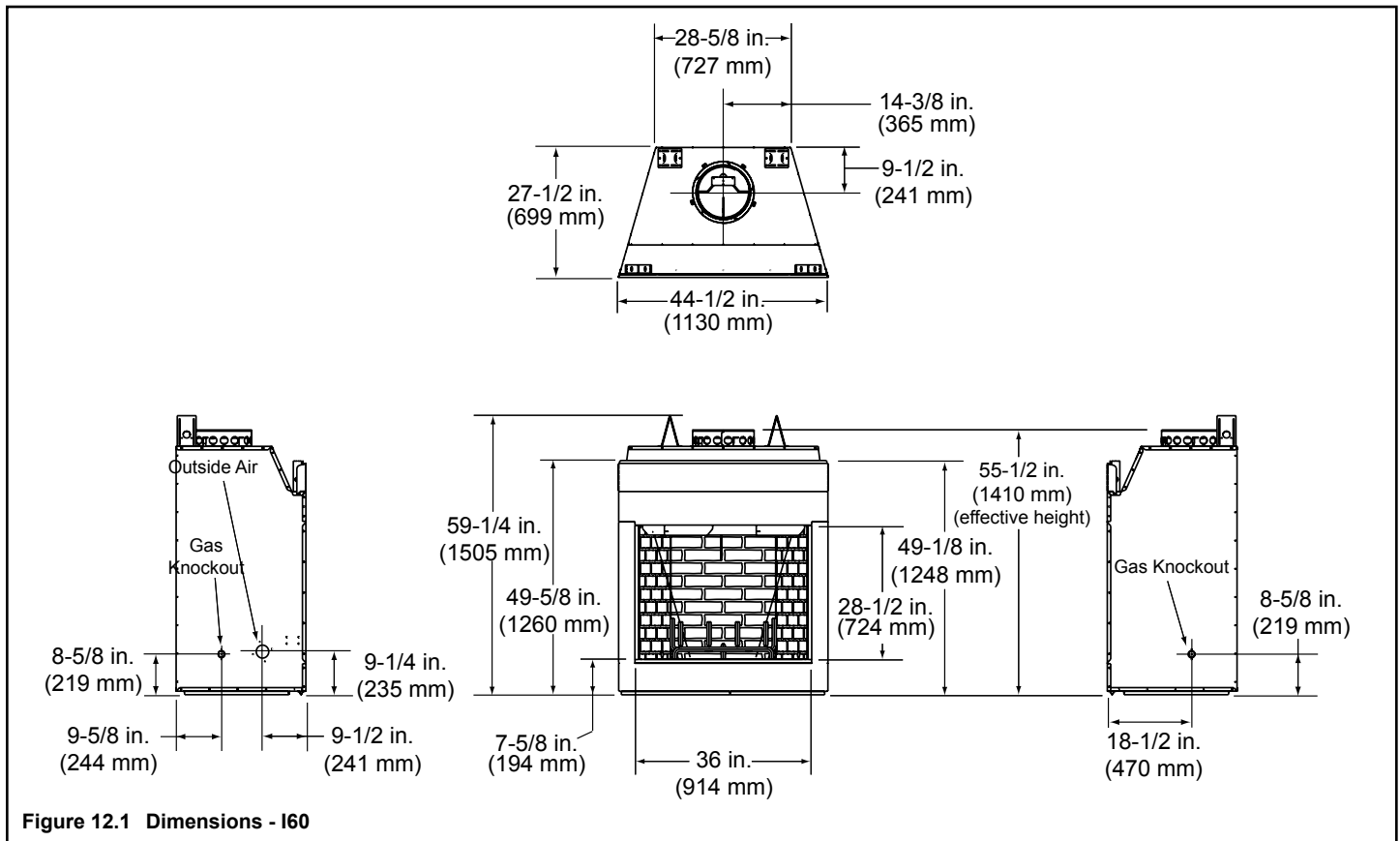
If a wood burning insert is being installed in this fireplace, Hearth & Home Technologies recommends full reline of the chimney.

- Cooling air openings at the top of the chimney must not be obstructed in any manner.
- Hearth & Home Technologies recommends securing the reline at the top of the flue and using the cap certified for use with this fireplace system.



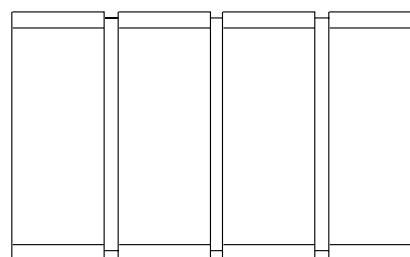
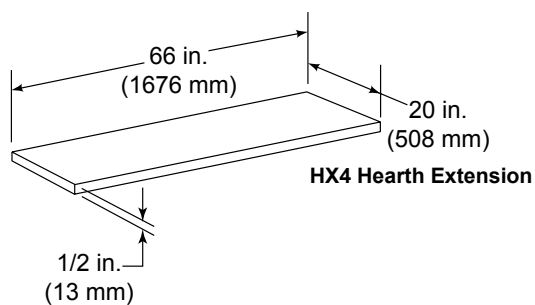
13 Reference Materials

A. Fireplace Dimensions



B. Optional Components

I60	I80	Description
DM6036	DM8042	Glass doors - Bi-fold, clear view, black
DM6036B	DM8042B	Glass doors - Bi-fold, clear view, polished brass
DM6036S	DM8042S	Glass doors - Bi-fold, clear view, stainless steel
HX4	HX4	Hearth extension



Bi-fold Glass Doors

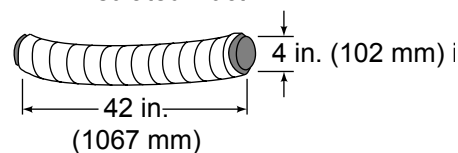
See your Heatilator dealer for a complete listing of optional components.

→ C. Chimney Components

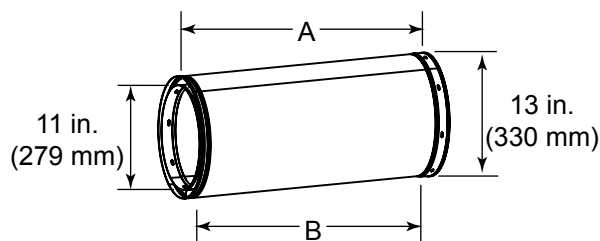
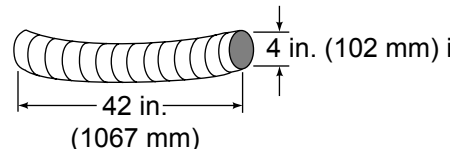
The following pictures show only those chimney components which may be safely used with this fireplace.

Catalog #		Description
US	CAN	
CAK5A	CAK5A	Chimney Air Kit
ID4	ID4	Insulated Duct/Outside Air
UD4	UD4	Uninsulated Duct/Outside Air
SL1106	SL406	Chimney Section - 6 in. (152 mm) long
SL1112	SL412	Chimney Section - 12 in. (305 mm) long
SL1118	SL418	Chimney Section - 18 in. (457 mm) long
SL1136	SL436	Chimney Section - 36 in. (914 mm) long
SL1148	SL448	Chimney Section - 48 in. (1219 mm) long
SL11	SL4	Chimney Stabilizer
SL1130	SL430	Chimney Offset/Return - 30 deg
FS538	FS538	Ceiling Firestop - Straight
FS540	FS540	Ceiling Firestop - 30 deg
AS10	AS10	Straight Attic Insulation Shield, 24 in. (610 mm)
JB577	JB577	Chimney Joint Band
CB576	CB576	Chimney Bracket
RF570	RF570	Roof Flashing - Flat to 6/12 Pitch
RF571	RF571	Roof Flashing - 6/12 to 12/12 Pitch
TR11	TR444	Round Termination Cap
TR11T	TR442	Round Telescoping Termination Cap
TCT1175		Terra Cotta Termination Cap
ST1175	ST475	Square Termination Cap
CT56	CT56	Chase Top
LDS33	LDS33	Decorative Shroud - 3 ft x 3 ft (.91 m x .91 m)
LDS46	LDS46	Decorative Shroud - 4 ft x 6 ft (1.22 m x 1.83 m)
LDS-BV	LDS-BV	Decorative Shroud - 26 in. x 26 in. (660 mm x 660 mm)
		Field Constructed Shrouds (See "Woodburning Termination Cap")
CT-11A	n/a	Adapter-May be used with the following Copper Caps
	n/a	CT-King
	n/a	CT-Queen
	n/a	CT-Bishop I
	n/a	CT-Bishop II
	n/a	CT-Knight I
	n/a	CT-Pawn

ID4 Insulated Duct



UD4 Uninsulated Duct

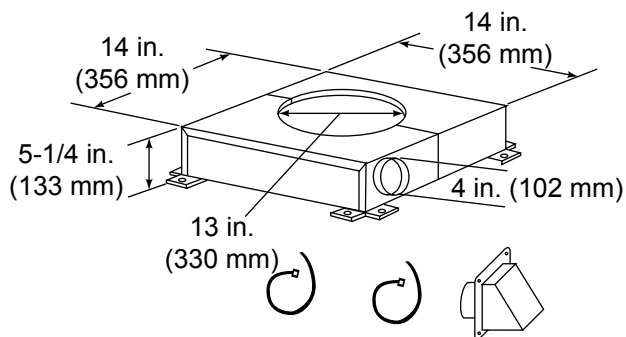


Chimney Sections

Catalog #		A		B	
US	CAN	in	mm	in	mm
SL1106	SL406	6	152	4-3/4	121
SL1112	SL412	12	305	10-3/4	273
SL1118	SL418	18	457	16-3/4	425
SL1136	SL436	36	914	34-3/4	883
SL1148	SL448	48	1219	46-3/4	1187

A = Actual Length

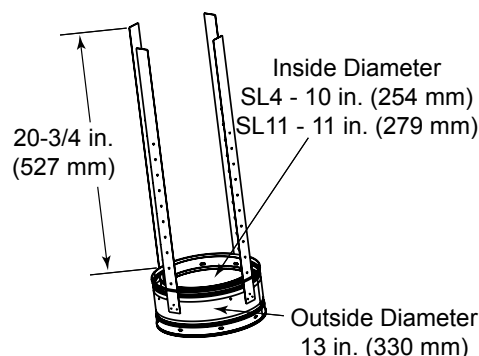
B = Effective Length (length of chimney part after it has been snapped to another)



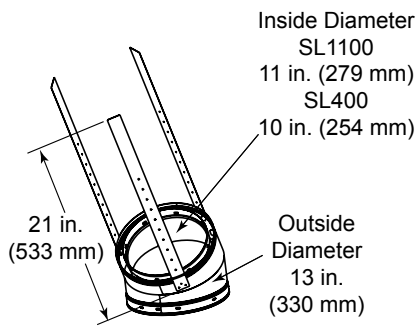
CAK5A Chimney Air Kit



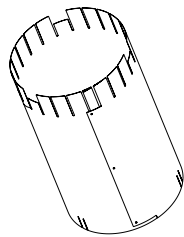
SLA10 Adaptor
(Required in Canada)



→ SL11/SL4 Vent Stabilizer

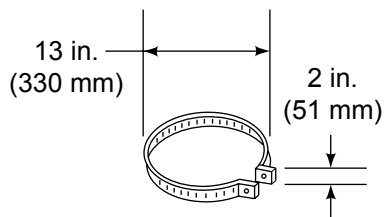


SL1130/SL430 Offset/Return

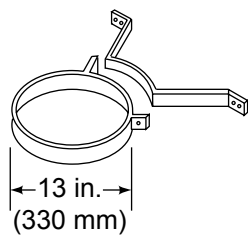


Assembled
Diameter: 17 in./432 mm
Height: 24 in./610 mm

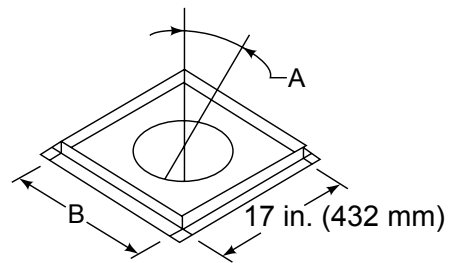
AS10 Straight Attic Insulation Shield



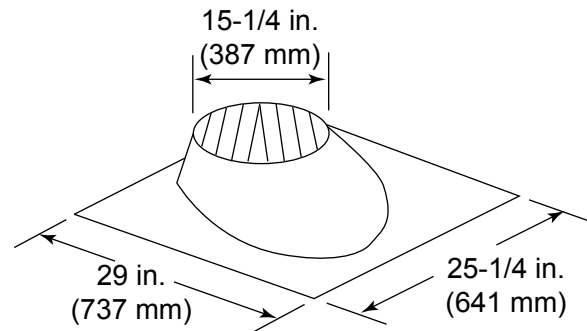
JB577 Chimney Joint Band



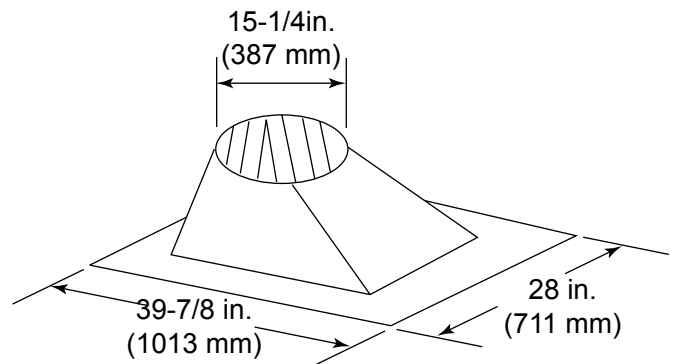
CB576 Chimney Joint Band



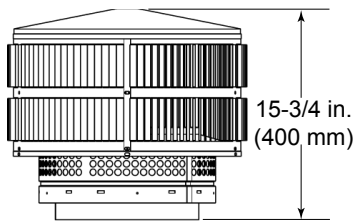
Catalog #	A	B	
FS538	0-deg.	17 in.	432 mm
FS540	30-deg.	26 in.	660 mm



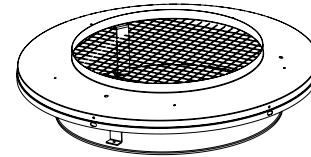
RF570 Roof Flashing



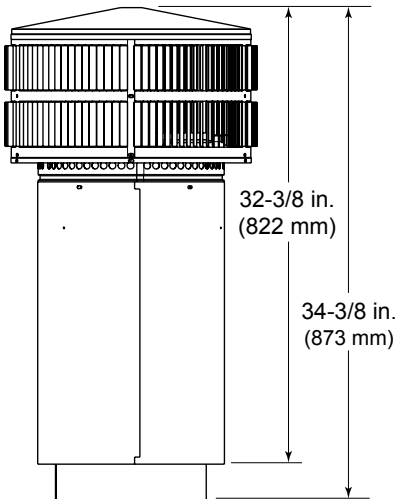
RF571 Roof Flashing



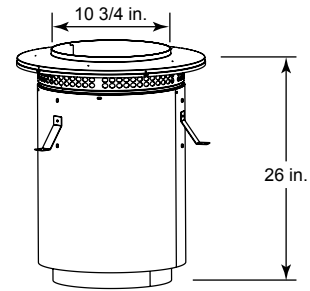
TR11/TR444 - Round Termination Cap



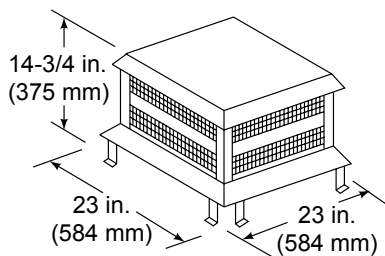
**TR-TVK
TR Top Vent Kit**



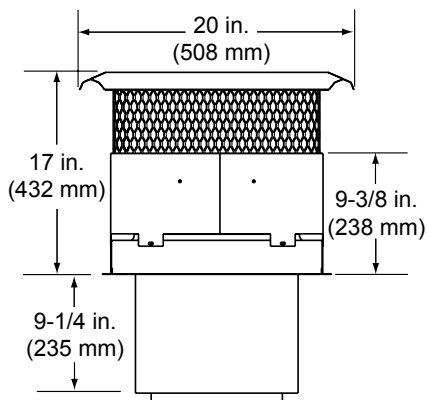
TR11T/TR442 - Round Telescoping Termination Cap



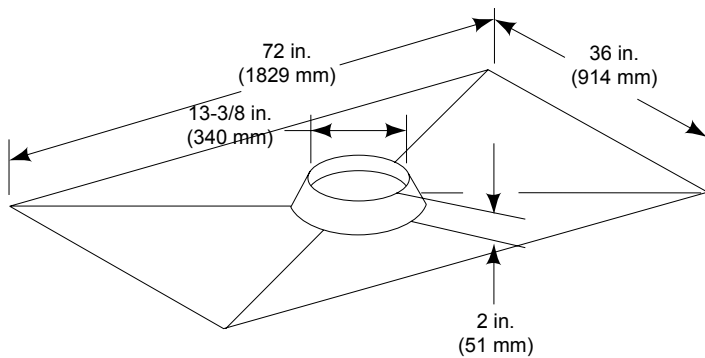
CT-11A



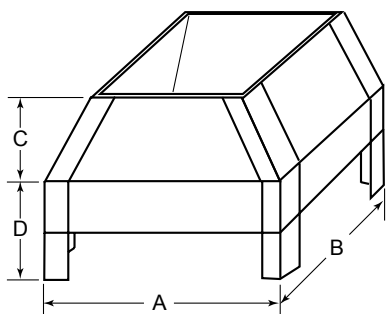
ST1175/ST475 - Square Termination Cap



TCT1175 - Terra Cotta Cap

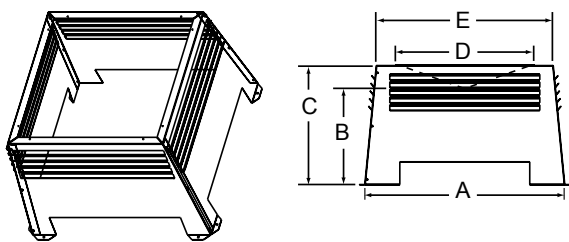


CT56 Chase Top



LDS33/LDS46 Decorative Shroud

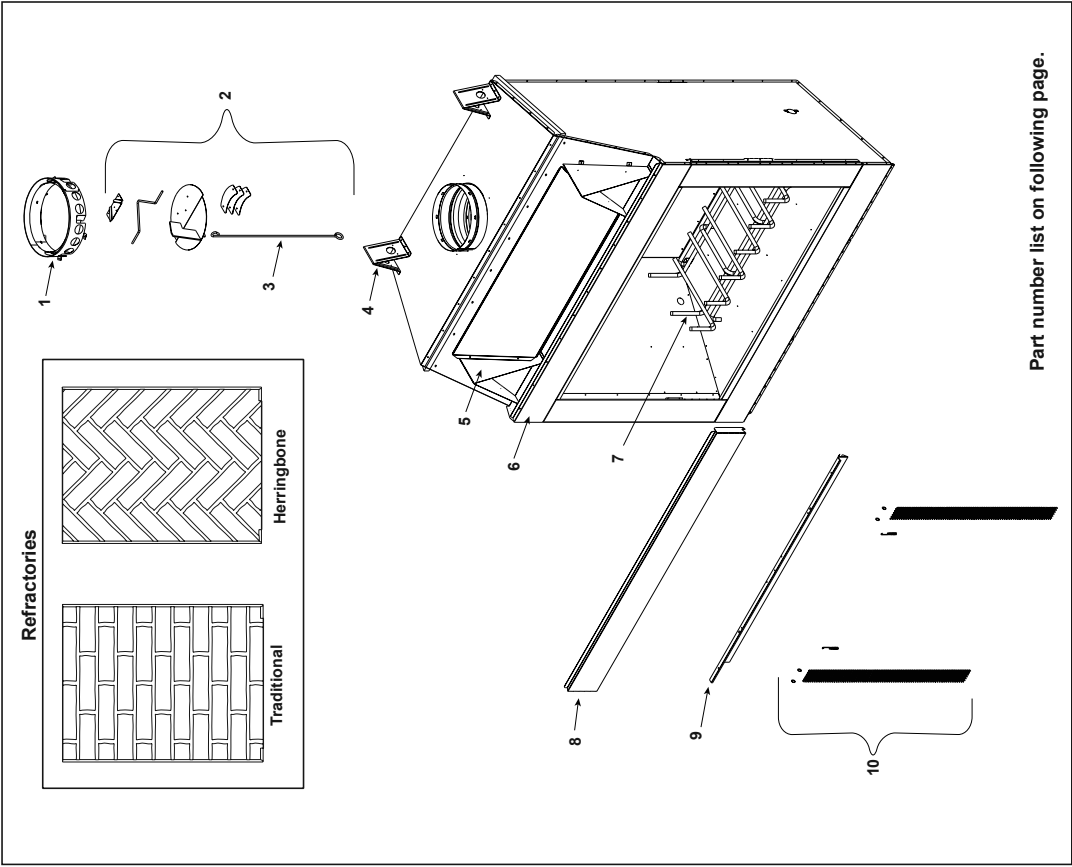
Catalog #	A		B		C		D	
	in.	mm	in.	mm	in.	mm	in.	mm
LDS33	36	914	36	914	8-1/2	216	11	279
LDS46	48	1219	72	1829	8-1/2	216	11	279



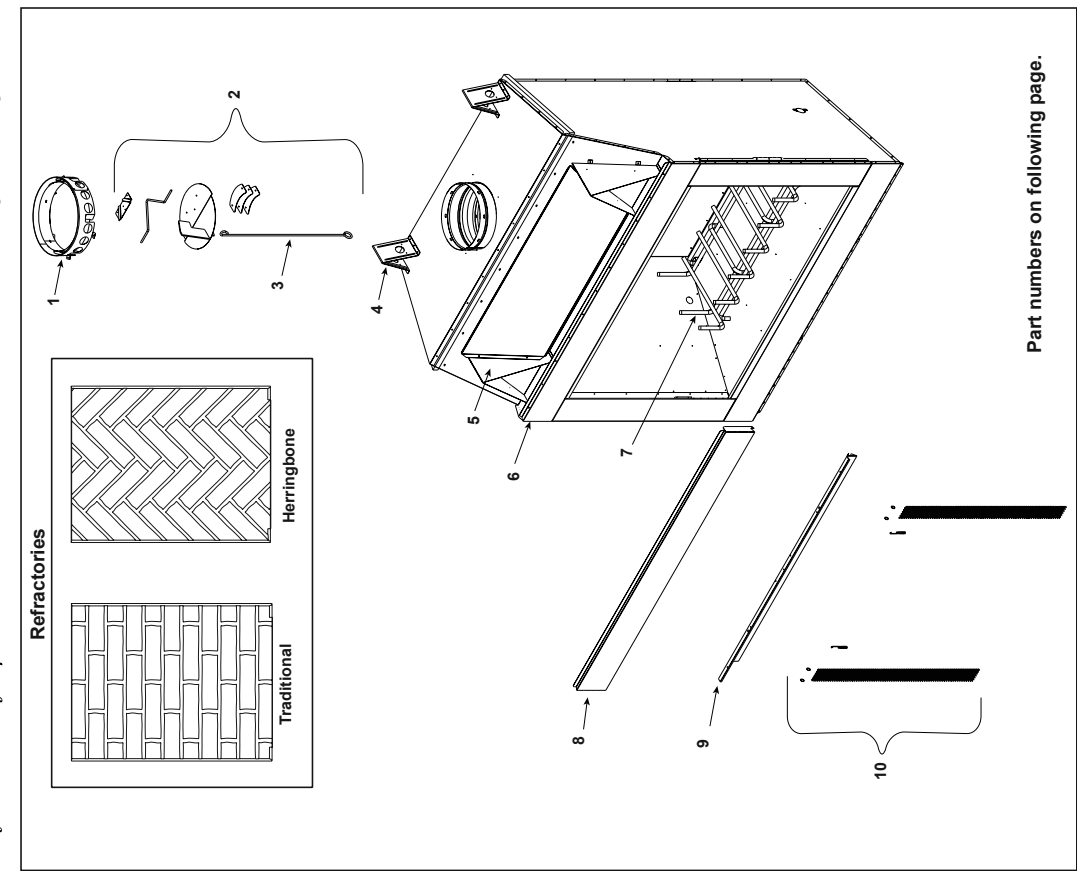
LDS-BV Decorative Shroud

Catalog #		A	B	C	D	E
LDS-BV	in.	26	12-1/2	15-1/2	22	23
	mm	660	318	394	533	584

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ITEM	DESCRIPTION	COMMENTS	PART NUMBER	Stocked at Depot
1	Starter Section Assembly		22072B	Y
2	Damper Blade Assembly		29964	
3	Damper Control		20549	
4	Damper Weight		19785A	
5	Rear Top Standoff	Qty. 2 req.	19228	
6	Front Top Standoff	Qty. 2 req.	11864i	
7	Top Front Face	Overlay Only	31313	
8	Grate		GR30	
9	Upper Front		4013-206	
10	Smoke Shield		32949	Y
	Firescreen Assembly		33699	Y
	Firescreen Handle	1 ea.	4021-150	
	Firescreen Rod	Qty. 2 req.	12052	
	Grate Retainer	Qty. 2 req.	34555	
	Nailing Flange	Qty. 4 req.	31190	
	Outside Air Kit		AK22	
	Fastener Pack		17916B	
	Outside Air Shield		33271	Y
	4 in. Outside Air Inlet Ring		25692	
	Refractory Retainer	Qty. 3 req.	11847	
	Screen Cover (top only)	Qty. 2 req.	31319	
	Side Trim	Qty. 2 req.	31326	
	Strip Protector	Qty. 2 req.	18320	
	Powder Coat Touch-Up Paint		71479	
Herringbone Refractory (I60H)				
	Brick Refractory - Back		33676	
	Brick Refractory - Hearth		11847	
	Brick Refractory - Left Side		33677	
	Brick Refractory - Right Side		33003	
Traditional Refractory (I60CT)				
	Brick Refractory - Hearth		11847	
	Brick Refractory - Back- 3 Color- No longer Available	Pre AK994430	4013-193	
	Brick Refractory - Back- 2 Color	Post AK994430	4013-225	
	Brick Refractory - Hearth-3 Color- No longer Available	Pre AK994430	4013-050	
	Brick Refractory - Hearth-2 Color	Post AK994430	4013-223	
	Brick Refractory - Side- 3 Color- No longer Available	Pre AK994430	4013-194	
	Brick Refractory - Side- 2 Color	Post AK994430	4013-224	
	Installation Instructions & Owner's Manual		4013-250	



Part numbers on following page.

11/08

ITEM	DESCRIPTION	COMMENTS	PART NUMBER	Stocked at Depot
1	Starter Section Assembly		22072B	Y
2	Damper Blade Assembly		29964	
3	Damper Control		20549	
	Damper Weight		19785A	
4	Rear Top Standoff	Qty. 2 req.	19228	
5	Front Top Standoff	Qty. 2 req.	11864i	
6	Top Front Face	Overlay only	29922	
7	Grate		GR29	
8	Upper Front Face		4013-207	
9	Smoke Shield		29946	Y
10	Firescreen Assembly		29958	Y
	Firescreen Handle	1 ea.	4021-150	
	Firescreen Rod	Qty. 2 req.	28404	
	Grate Retainer	Qty. 2 req.	34555	
	Nailing Flange	Qty. 4 req.	31190	
	Outside Air Kit		AK22	
	Fastener Pack		17916B	
	Outside Air Shield		33271	Y
	4 in. Outside Air Inlet Ring		25692	
	Refractory Retainer Kit		34584	
	Refractory Retainer	Qty. 3 req.	34584	
	Grate Retainer	Qty. 2 req.	11847	
	Screen Cover (top only)	Qty. 2 req.	29926	
	Side Trim	Qty. 2 req.	31326	
	Smoke Shield Kit		35406	
	Rear Smoke Shelf		35597	
	Strip Protector	Qty. 2 req.	18320	
	Touch-Up Paint		71479	
Herringbone Refractory (180H) (Dusky Rose)				
	Brick Refractory - Back		33675	
	Brick Refractory - Hearth		22957	
	Brick Refractory - Left Side		33677	
	Brick Refractory - RightSide		33676	
Traditional Refractory (180CT)				
	Brick Refractory - Back-3 color- No longer available		4013-195	
	Brick Refractory - Back-2 color	Pre AK994430	4013-195	
	Brick Refractory - Back-2 color	Post AK994430	4013-227	
	Brick Refractory - Hearth-3 color- No longer available	Pre AK994430	4013-058	
	Brick Refractory - Hearth-3 color	Post AK994430	4013-226	
	Brick Refractory - Hearth- 2 Color	Pre AK994430	4013-193	
	Brick Refractory - Right/Left Side-3 color- No longer available	Pre AK994430	4013-193	
	Brick Refractory - Right/Left Side-2 color	Post AK994430	4013-224	
	Installation Instructions & Owner's Manual		4013-250	

11/08

E. Contact Information





Hearth & Home Technologies Inc.
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Mt. Pleasant, Iowa 52641
www.heatilator.com

Please contact your Heatilator dealer with any questions or concerns.

For the number of your nearest Heatilator dealer, please visit www.heatilator.com.

– NOTES –

CAUTION			
	DO NOT DISCARD THIS MANUAL		
	• Important operating and maintenance instructions included.	• Read, understand and follow these instructions for safe installation and operation.	• Leave this manual with party responsible for use and operation.



This product may be covered by one or more of the following patents: (United States) 4593510, 4686807, 4766876, 4793322, 4811534, 5000162, 5016609, 5076254, 5113843, 5191877, 5218953, 5263471, 5328356, 5341794, 5347983, 5429495, 5452708, 5542407, 5601073, 5613487, 5647340, 5688568, 5762062, 5775408, 5890485, 5931661, 5941237, 5947112, 5996575, 6006743, 6019099, 6048195, 6053165, 6145502, 6170481, 6237588, 6296474, 6374822, 6413079, 6439226, 6484712, 6543698, 6550687, 6601579, 6672860, 6688302B2, 6715724B2, 6729551, 6736133, 6748940, 6748942, 6769426, 6774802, 6796302, 6840261, 6848441, 6863064, 6866205, 6869278, 6875012, 6880275, 6908039, 6919884, D320652, D445174, D462436; (Canada) 1297749, 2195264, 2225408, 2313972; (Australia) 780250, 780403, 1418504 or other U.S. and foreign patents pending.